

# **Purolator**

We deliver Canada

**2017 Parts Catalog**



Ford F-59 Chassis

2017 Morgan Olson Body



1.800.233.4823  
WWW.MORGANOLSON.COM





TABLE OF CONTENTS	4
INTRODUCTION	5
CAB - ENGINE BOX - WINDSHIELD	6-7
STEPS - WIPER COVER	8-9
HEATER - DEFROSTER	10-11
HOOD	12-13
INSTRUMENT PANEL & SEATS	14-15
FLOOR	16-17
SIDES	18-19
ROOF - BACK	20-21
SIDE DOOR - SIDE DOOR POCKET	22-23
BULKHEAD	24-25
ROLL UP DOOR - PART NUMBER 47005936	26-31
SHELVING / CARGO CONTROL	32-35
BUMPERS - KEYLESS SYSTEMS	36-37
MIRRORS & WIPER ASSEMBLY	38-39
MISCELLANEOUS	40-41
ELECTRICAL	42-43
WIRING HARNESS	44
WALK-IN VAN COMMON FASTENERS	45-49
WIRING DIAGRAMS	50-90

This parts guide contains illustrations and part numbers for Purolator Package Delivery Vehicles and applies to bill of material # JV001724 produced in 2017 on the FORD F-59 Chassis.

This book has been divided into chapters.

Each chapter has illustrations with part numbers and descriptions.

Each part is pointed out to help identify it.

Orientation references are from the rear of the vehicle facing forward.

LH (LEFT HAND) is ROADSIDE and RH (RIGHT HAND) is CURBSIDE.

Items listed as "Installations" include all fasteners and parts required for completion.

Items listed as "Assemblies" include the parts but do not include the common fasteners; nuts, bolts, rivets and washers, required for completion.

**Procedure to Order Parts**

1. Depending on the part desired, turn to the appropriate section.
2. Locate the desired part on the Illustration Page(s) and note it's number.
3. Contact a Morgan Olson Service Parts Representative. Have part numbers readily available.
4. When placing orders, specify serial numbers.

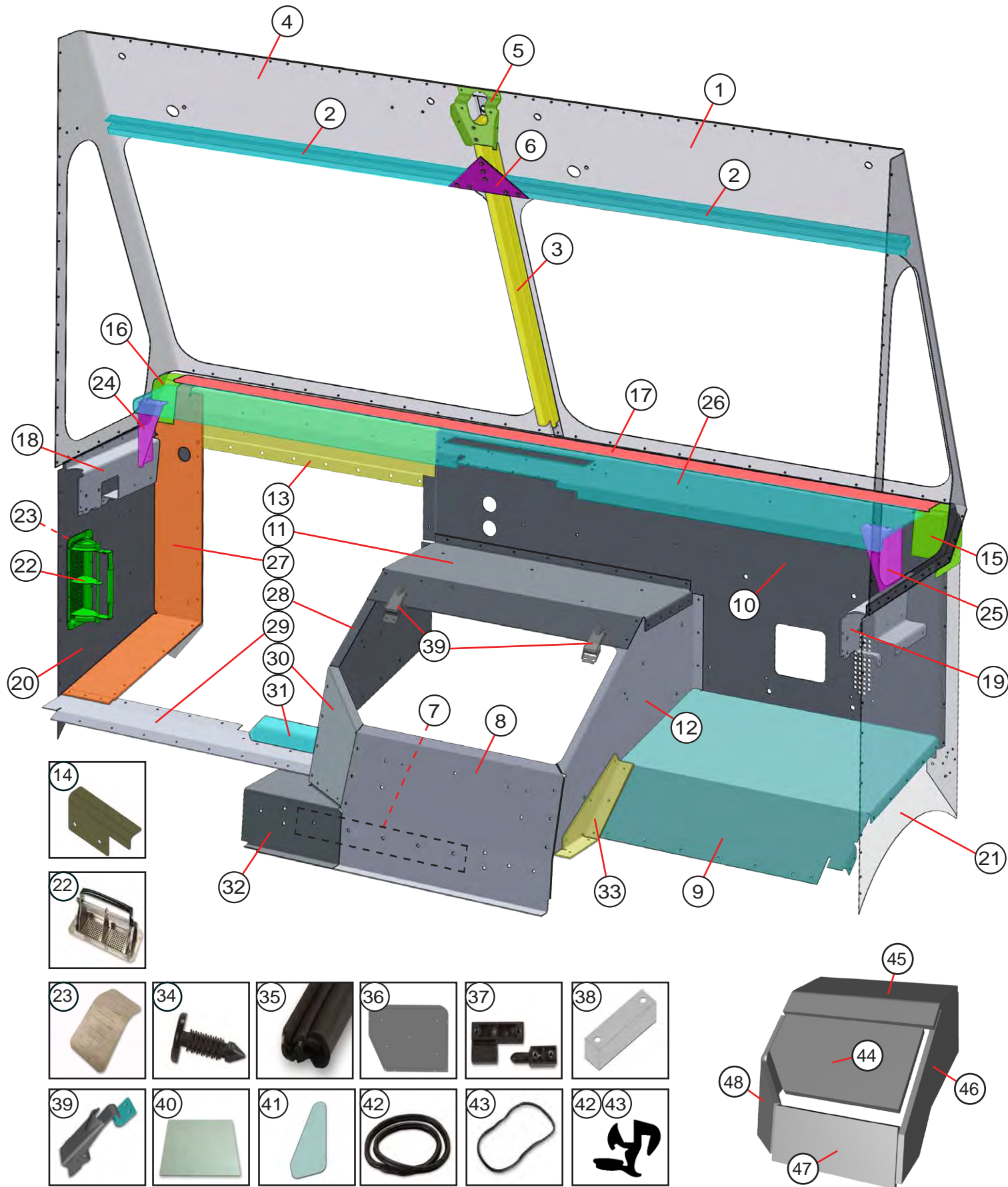
Parts are also available from our parts website at [www.morganolsonparts.com](http://www.morganolsonparts.com).

FOR WARRANTY INFORMATION CALL 1-800-262-3437

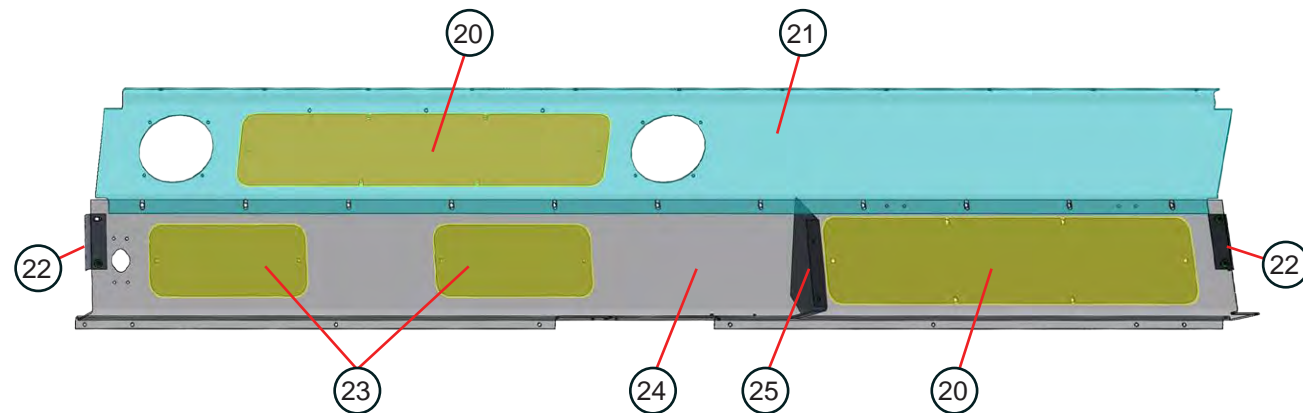
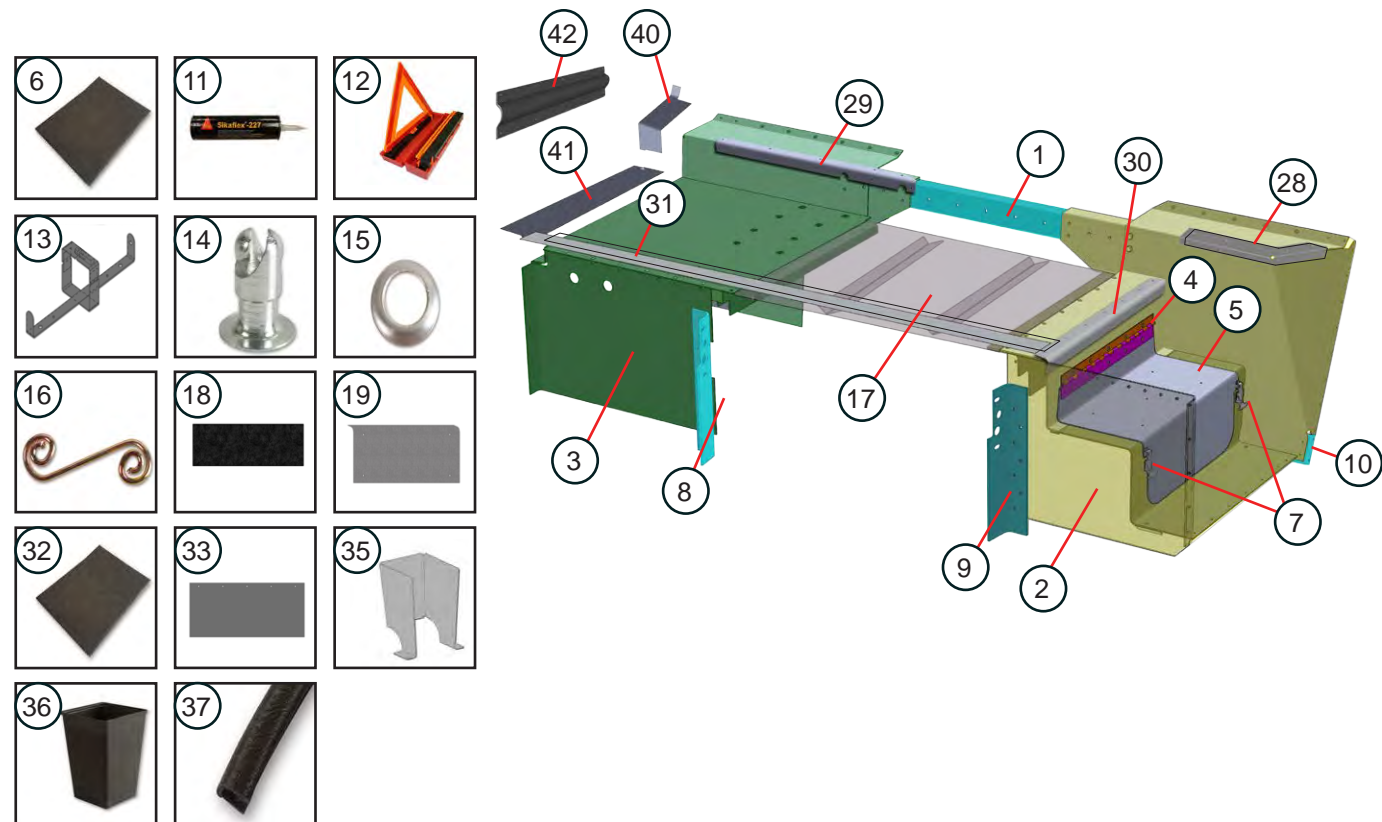
ANY QUESTIONS OR CONCERNS SHOULD BE DIRECTED TO YOUR SERVICE PARTS REPRESENTATIVE AT 1-800-233-4823

At Morgan Olson, our quest for quality and safety is ongoing and therefore the specifications on the product described herein may vary over time.

Please contact Morgan Olson for the latest product information and available safety features and options.



ITEM#	PART #	DESCRIPTION	QTY.	UNIT
1	088055402	FRAME W/S AL .102X49.72X70.07 RH	1	EA
2	077055404	STIFFENER W/S AL 450540X44.25	2	EA
3	077055400	POST W/S CENTER AL 450540X40	1	EA
4	088055401	FRAME W/S AL .102X49.72X69.77 LH	1	EA
5	077055402	GUSSET FRAME W/S AL .125X6.49X7.27	1	EA
6	998555329	GUSSET FRAME W/S AL .125X4.6X9.19	1	EA
7	077050402	SHIM AL .25X1.62X20.8	1	EA
8	115005404	PLATE SADDLE AL .125X15.74X24.07	1	EA
9	115005415	TOEBOARD AL .102X28.09X29.44LH	1	EA
10	115005400	DASH WALL AL .125X25.89X60.38	1	EA
11	115005402	ENGINE BOX TOP AL .125X15.88X33.04	1	EA
12	098005501	ENGINE BOX HOUSING AL .102X20.85X32.55 RH	1	EA
13	115005401	DASH PANEL DRIVER ISLAND AL .125X8.46X30.45	1	EA
14	168005402	PLATE FILLER AL .07X2.8X5	1	EA
15	8502001	CORNER AL CASTING W/S RH	1	EA
16	8502000	CORNER AL CASTING W/S LH	1	EA
17	083023402	RAIL W/S 93W AL 851100X89	1	EA
18	077050400	STIFFENER W/S AL .125X10.93X17.81 LH	1	EA
19	077050401	STIFFENER W/S AL .125X10.93X17.81 RH	1	EA
20	115005417	CAB SKIRT AL .07X27.29X30.57 LH	1	EA
21	093005440	CAB SKIRT AL .07X27.29X30.57 RH	1	EA
22	47008545	VENT AL 2WAY (GUARD FOR VENT AL - 003711425)	1	EA
23	47008548	GASKET FOR VENT #47008545	1	EA
24	083005418	SUPPORT RAIL W/S AL .102X5.74X8.27 LH	1	EA
25	083005419	SUPPORT RAIL W/S AL .102X5.74X8.27 RH	1	EA
26	093005512	SHELF DASH AL .125X13.74X89	1	EA
27	115005406	ADAPTOR TOE BOARD AL .102X7.24X45.63	1	EA
28	115005403	ENGINE BOX SIDE AL .102X19.26X27.88 LH	1	EA
29	115005405	TOE BOARD AL .125X6.76X34.53 LH	1	EA
30	115005408	SADDLE FILLER LOWER AL .125X9.6X13.06	1	EA
31	115005420	CASTING TRANSITION F59	1	EA
32	115005409	SADDLE FILLER LOWER AL .125X11.67X14.51	1	EA
33	115005416	SUPPORT TOE BOARD AL .125X7.84X14.44	1	EA
34	47006630	CLIP PLASTIC ROUND HEAD 1.32-1.34	15	EA
35	1107270	SEAL TRIM ENGINE BOX	8	FT
36	145028400	PANEL LID ENGINE BOX AL .102X20.3X33.06	1	EA
37	47007859	HINGE OFFSET	2	EA
38	117028400	SHIM ENG BOX HINGE	2	EA
39	47000932	LATCH ADJUSTABLE DRAW	2	EA
40	96756400	WINDSHIELD GLASS	2	EA
41	083056401	SIDE GLASS TRIANGLE 30 DEGREE	2	EA
42	44004303	WEATHER STRIP MOULDING FOR WINDSHIELD X147.5"	2	EA
43	44004305	WEATHER STRIP MOULDING FOR SIDE GLASS X85.5"	2	EA
44	115028402	INSULATION ENGINE BOX 42002056X13.55X27.09	1	EA
45	115028401	INSULATION ENGINE BOX 42002056X14.34X29.88	1	EA
46	098005406	INSULATION ENGINE BOX 42002056X21.25X30.59	1	EA
47	115028404	INSULATION ENGINE BOX 42002056X8.09X22.61	1	EA
48	115028403	INSULATION ENGINE BOX 42002056X17.43X32.37	1	EA
NS	093116410	INSULATION DASH WALL	1	EA
NS	155019400	HEEL REST DIAMOND PLATE .08X9.25X11 LH	1	EA



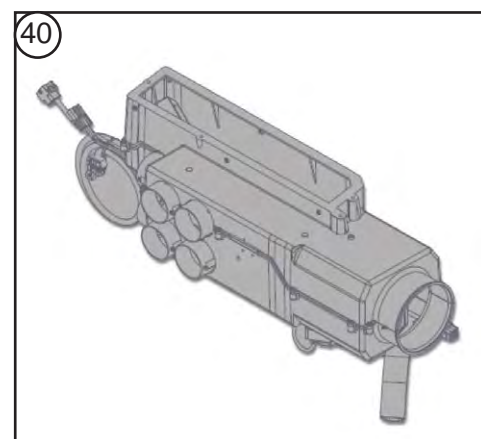
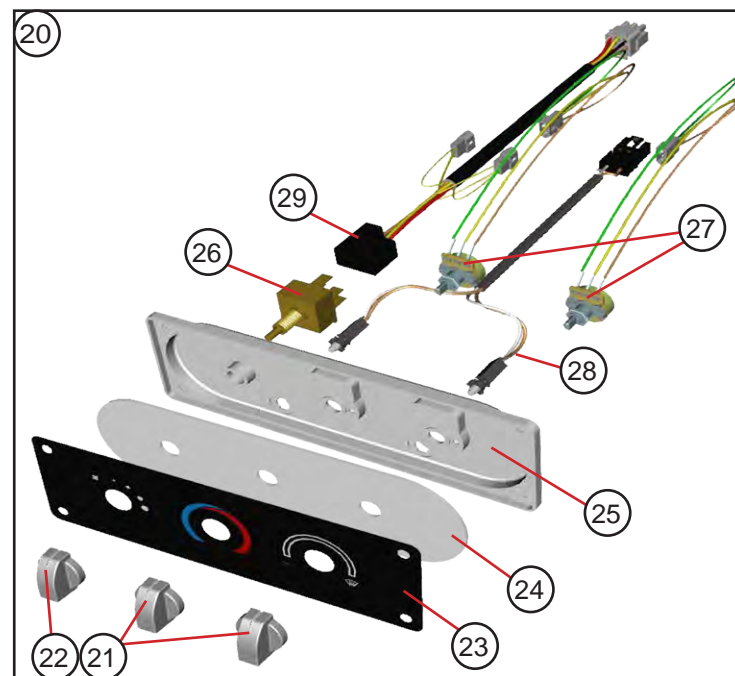
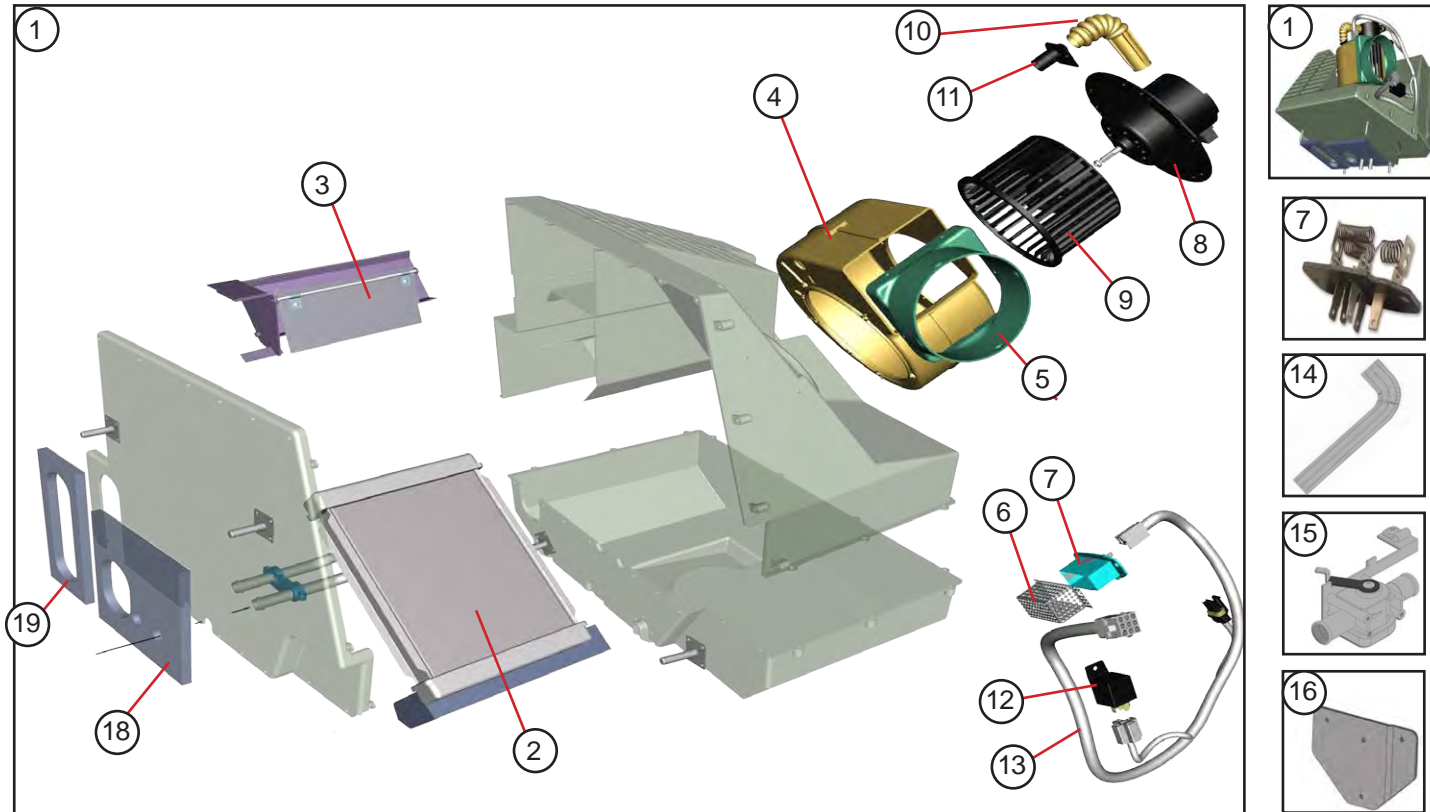
ITEM #	PART#	DESCRIPTION	QTY.	UNIT
1	077240400	CROSS MEMBER CENTER AL 456106X41	1	EA
2	135024200	STEP ASSEMBLY WELDMENT RH F59 93W	1	EA
3	115024203	STEP ASSEMBLY WELDMENT DLH 93W F59	1	EA
4	006324498	HINGE AL .075X1.12X1.75X21	1	EA
5	125024400	LID BATTERY AL .125X22.25X22.78	1	EA
6	96724608	PAD DAMPENING 45200007X9X20	1	EA
7	1113334	LATCH STEP	2	EA
8	165024412	ANGLE COMP AL .25X6.22X18 VERTICAL STEP LH	1	EA
9	165024411	ANGLE COMP AL .25X6.22X18 VERTICAL STEP RH	1	EA
10	084024415	RISER CORNER AL .125X3.5X3.61 RH	1	EA
11	41002103	SEALANT / ADHESIVE	1	EA
12	47009547	TRIANGLE KIT SAFETY	1	EA
13	47009548	BRACKET MOUNTING TRIANGLE KIT	1	EA
14	40900080	STUD	7	EA
15	40900081	GROM HALF	7	EA
16	40900082	SPRING	7	EA
17	105024209	TRNSVERSE FLOOR PLATE WELDMENT	1	EA
18	098137400	PLATE STEP .125X5X24.12	1	EA
19	45400524	OVERLAY STEP WITH 1" LIP	1	EA
33	138026413	SPLASH SHIELD BATTERY	1	EA

**WIPER COVER ASSEMBLY**

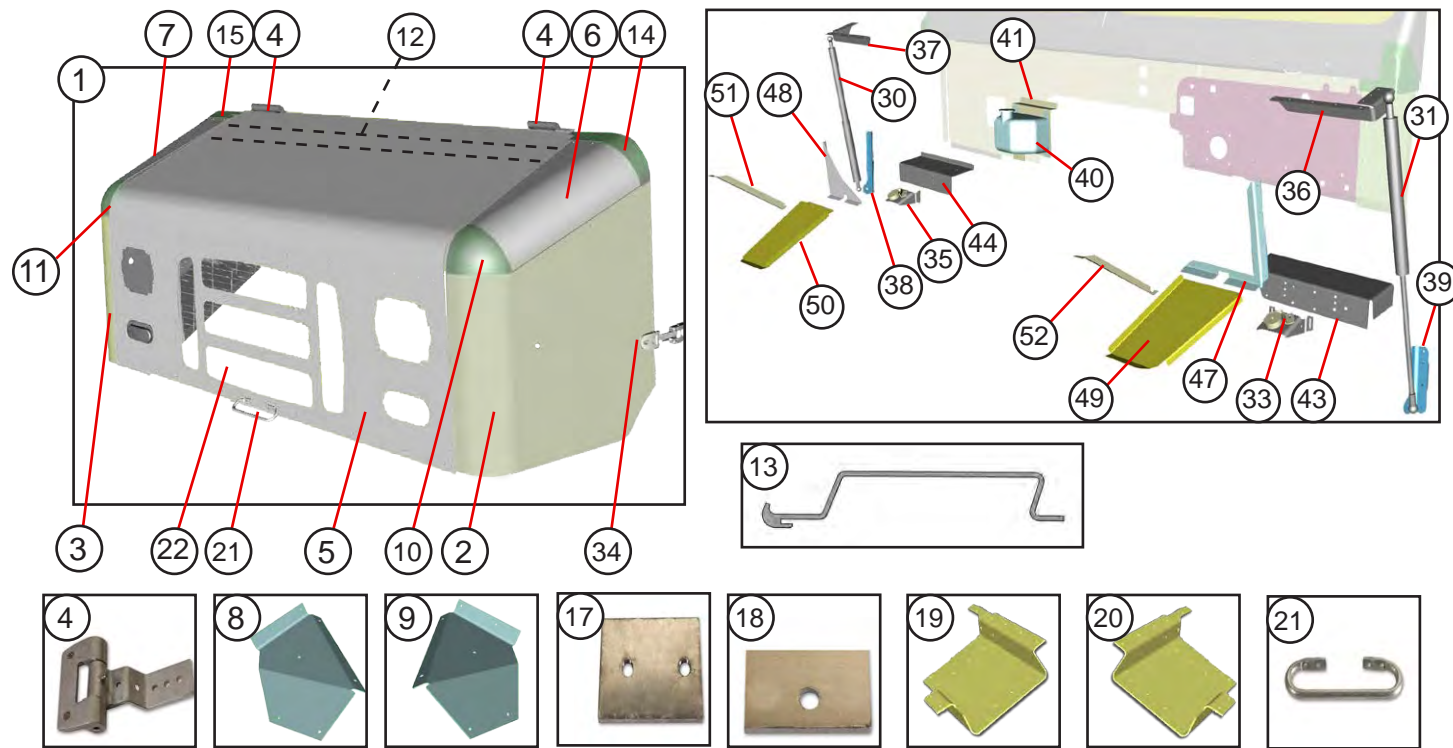
20	097076435	PLATE COVER ACC AL .070X6X28.38	2	EA
21	088076437	COVER MOTOR WIPER AL .102X10.85X87.25	1	EA
22	088076449	BRACKET MOUNTING AL .102X2.36X3.9 LH	1	EA
23	088076431	PLATE COVER WIPER MOTOR AL .102X5X12	2	EA
24	165076402	SHELF LOWER AL .102X16.6X90.31	1	EA
25	088076449	BRKT MTG AL.102X2.36X3.9 LH	1	EA
25	088076451	DIVIDER SHELF AL .102X9.01X9.46	1	EA

**TRIM PACKAGE**

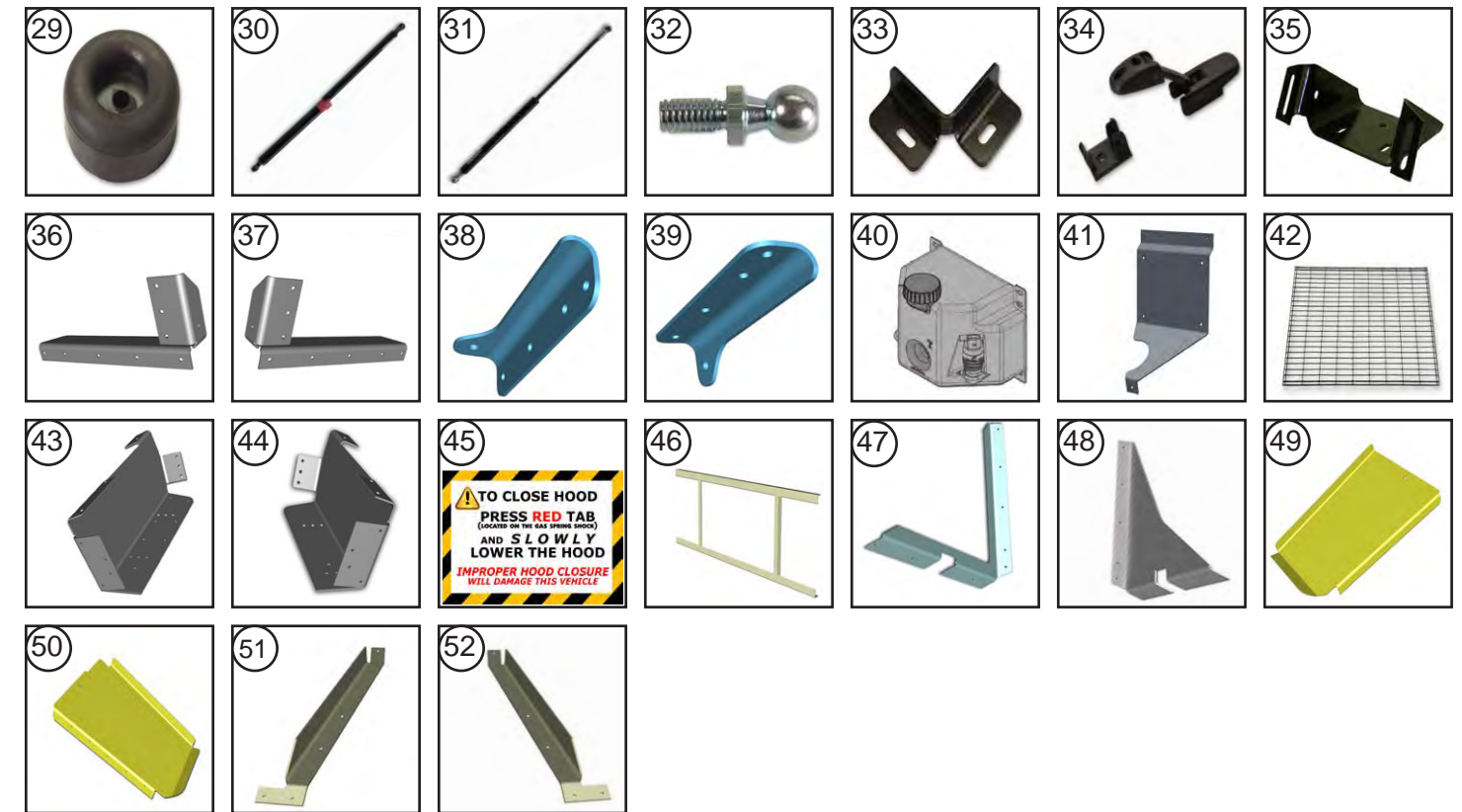
28	090019401	TRIM TOE BOARD ALD .08X7.89X22.64 RH	1	EA
29	103019402	TRIM TOE BOARD ALD .08X2.63X30.58 LH	1	EA
30	090019403	TRIM STEP ALD .08X2.69X26.5 RH	1	EA
31	083019413	TRIM @ O-LINE ALD .08X2.27X66.41	1	EA
32	42002055	INSULATION SOUND ABSORBING FLOORMAT 60x90	1	EA
35	05M078011	BRACKET MOUNTING TRASH AL .125X19.89X24.7	1	EA
36	45200051	TRASH BIN BLACK	1	EA
37	1129005	QUICK EDGE	1.33	FT
40	083005459	PLATE FILLER AL .07X5.83X13.64 DLH	1	EA
41	083005452	PLATE FILLER AL .07X4.08X27.58 DLH	1	EA
42	7600858	STIFFENER SLIDING WINDOW AL 450003X33.5 DLH	2	EA



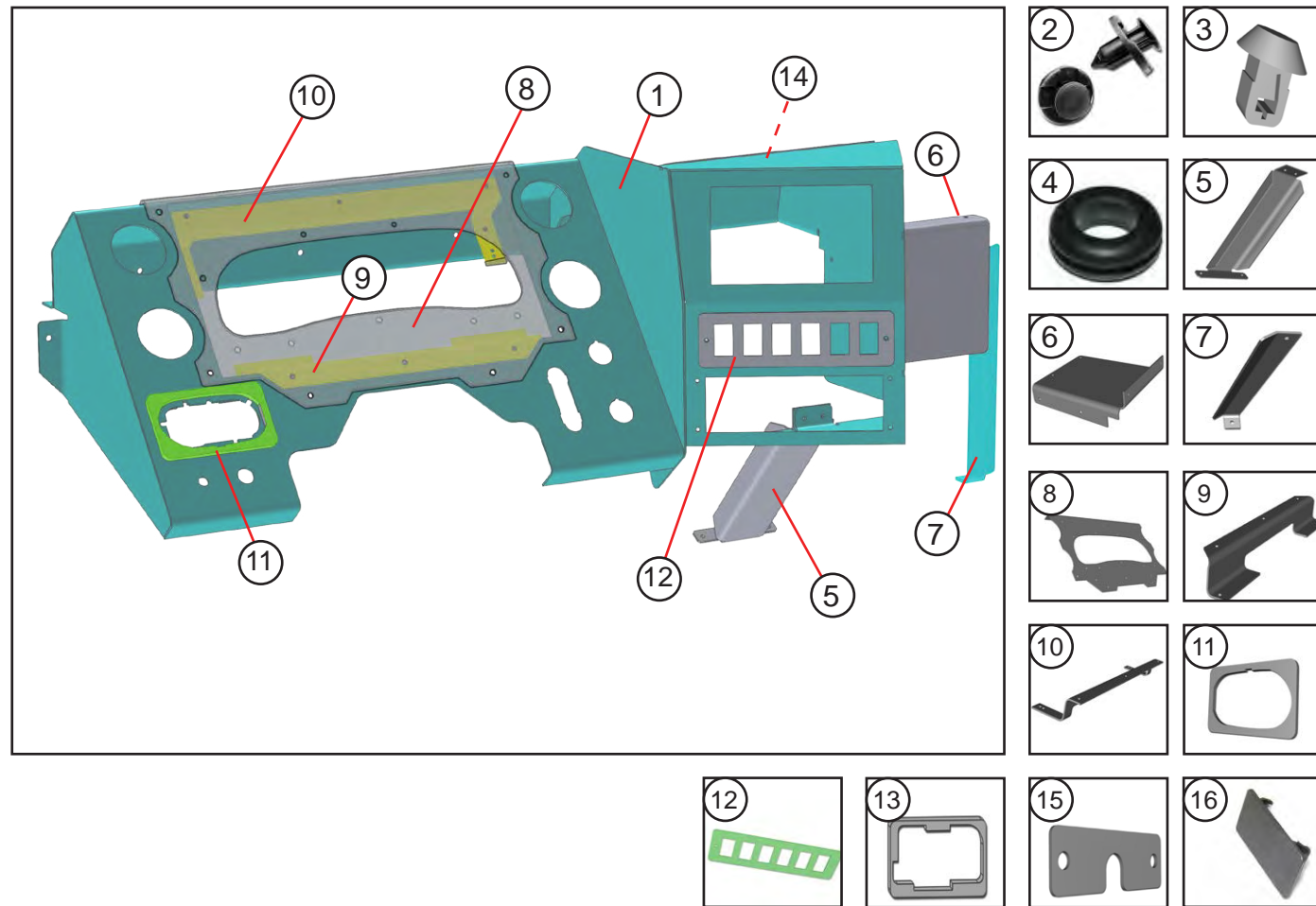
ITEM #	PART #	DESCRIPTION	QTY	UNIT
1	555001014	HEATER CORE	1	EA
2	47008760	HEATER COIL W/GASKET & CLAMP	1	EA
3	47008753	DOOR W/SEAL	1	EA
4	47008754	BLOWER HOUSING	1	EA
5	47008755	BLOWER ADAPTER	1	EA
6	47008732	RESISTER CAGE	1	EA
7	47008357	RESISTER	1	EA
8	47008756	BLOWER MOTOR	1	EA
9	47008757	BLOWER WHEEL	1	EA
10	47008730	VENT TUBE	1	EA
11	47008731	VENT TUBE ADAPTER	1	EA
12	47008716	RELAY	1	EA
13	47008758	HARNESS	1	EA
14	47008580	FORMED HEATER HOSE 5/8" (.937 OD - .625 ID) 4.875"	2	EA
15	555002053	VALVE WATER	1	EA
16	105080401	PLATE MOUNTING FOOT DUMP AL .07X4.25X5.53	1	EA
17	090080401	DUCT FOOT DUMP SPECIAL	1	EA
18	21-01201	GASKET - PART OF HEATER ASSEMBLY	1	EA
19	21-01202	GASKET - PART OF HEATER ASSEMBLY	1	EA
20	555001413	CONTROL PANEL ASSEMBLY	1	EA
21	47008706	KNOB - FAN SPEED	2	EA
22	47008735	KNOB - TEMP & MODE	1	EA
23	47008707	DECAL	1	EA
24	47008708	LIGHT PANEL	1	EA
25	47008709	CONTROL SUB PANEL	1	EA
26	47008700	BLOWER SWITCH	1	EA
27	47008710	POTENTIOMETER SWITCH	2	EA
28	47008711	HARNESS ILLUMINATION W/BULBS	1	EA
29	47008712	HARNESS BLOWER MOTOR	1	EA
30	555001723	DEFROST DUCT CURBSIDE METAL	1	EA
31	555001724	DEFROST DUCT ROADSIDE METAL	1	EA
32	093080400	HOLD DOWN PLATE DEFROSTER DUCTS	4	EA
33	555001538	HEATER HOSE 2.5" FLEXABLE (HEATER VENTS) (CUT TO FIT)	1	FT
35	555002003	FRESH AIR INTAKE SIDE WALL	1	EA
36	555002005	FRESH AIR INTAKE @ TOEBOARD	1	EA
37	555001715	LOUVER BALL	6	EA
38	555001533	HOSE BLOWER 5"DIA X 7.5"	1	EA
38	555001532	HOSE FRESH AIR 4"	1	EA
39	002080400	BRACKET HEATER CONTROL AL .102X3X11.67	1	EA
40	555001323	DUCT HVAC PLENUM	1	EA
41	47008017	CONNECTOR STRAIGHT .62ID BLACK NYLON	2	EA



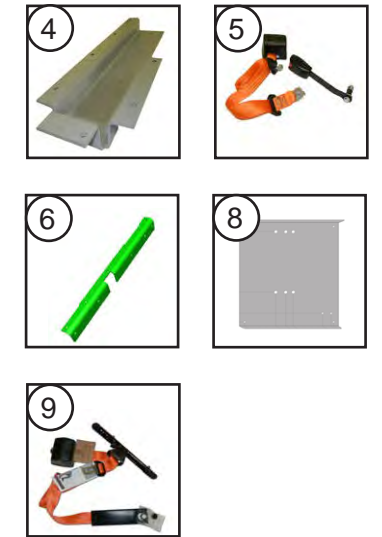
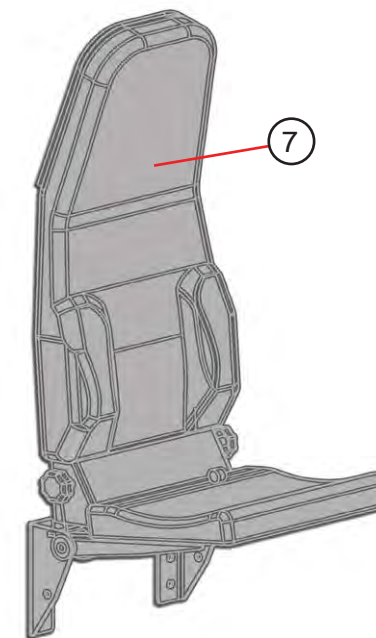
ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	115017200	HOOD ASSEMBLY	1	EA
2	088017414	HOOD SKIRT AL .07X30.78X33.11 ROADSIDE	1	EA
3	088017415	HOOD SKIRT AL .07X30.78X33.11 CURBSIDE	1	EA
4	47007852	HINGE ASSEMBLY	2	EA
5	115017400	PANEL HOOD FCC AL.07X53.36X72	1	EA
6	088017416	COWL HOOD ROADSIDE AL .07X15.91X22.28	1	EA
7	088017417	COWL HOOD CURBSIDE AL .07X15.91X22.28	1	EA
8	95817312	GUSSET CORNER ROADSIDE AL .07X13.52X14.72	1	EA
9	95817313	GUSSET CORNER CURBSIDE AL .07X13.52X14.72	1	EA
10	45100057	CORNER CAST KNEE COWL FRONT ROADSIDE	1	EA
11	45100058	CORNER CAST KNEE COWL FRONT CURBSIDE	1	EA
12	088017420	STIFFENER HOOD AL 450015X68.62	1	EA
13	45001500	BRACKET HOOD AL HD X69.77	1	EA
14	45100060	CAP COWL END ROADSIDE	1	EA
15	45100061	CAP COWL END CURBSIDE	1	EA
46	088017255	SUPPORT ASSEMBLY GRILL	1	EA
17	91617304	PLATE TAP	2	EA
18	96717312	SHIM HOOD AL .125X.62X1.88	2	EA
19	115017403	STIFFENER HOOD ROADSIDE	1	EA
20	115017404	STIFFENER HOOD CURBSIDE	1	EA
21	90187300	GRAB HANDLE	1	EA
22	45700101	GRILLE WIRE MESH 20.5X38.81	1	EA
NS	088017423	ANGLE SUPPORT GRILLE 450186X69.62	1	EA
NS	088017421	SUPPORT GRILLE ANGLE 450180X22.8	2	EA
NS	088017441	ANGLE HORZ 450186X69.62	1	EA
NS	44004077	SEAL TAPE #1458BTXFT	4.42	FT



ITEM #	PART #	DESCRIPTION	QTY.	UNIT
29	44002004	BUMPER RUBBER HOOD REST	2	EA
30	47006116	GAS SPRING WITH LOCK 140LB 20/12 IGS	1	EA
31	47006117	GAS SPRING WITH OUT LOCK 140LB 20/12 IGS	1	EA
32	40900019	STUD BALL SUSPENSION	4	EA
33	96713300	ANGLE STEEL STOP HOOD REST	2	EA
34	47000613	HOOD LATCH	2	EA
35	077150400	BRACKET SUPPORT HOOD REST	2	EA
36	124016401	BRACKET GAS SPRING AL.125X3.6X16.48 ROADSIDE	1	EA
37	124016402	BRACKET GAS SPRING AL.125X3.6X16.48 CURBSIDE	1	EA
38	124016403	BRACKET HOOD LOWER AL.188X2.85X6.4 CURBSIDE	1	EA
39	124016404	BRACKET HOOD LOWER AL.188X2.85X6.4 ROADSIDE	1	EA
40	47004505	WASHER BOTTLE WITH PUMP	1	EA
41	165063401	BRACKET WASHER BOTTLE AL .102X9.59X19.69	1	EA
42	45700101	MESH GRILL	1	EA
43	115026400	SPLASH PAN ROADSIDE	1	EA
44	077260404	SPLASH PAN CURBSIDE	1	EA
45	43000903	HOOD PROPER INSTRUCTIONS LABEL	1	EA
47	088017433	SUPPORT SPLASH PAN AL .102X16.07X16.83	1	EA
48	088017436	SUPPORT SPLASH PAN AL .102X16.07X16.83	1	EA
49	088017427	SPLASH PAN AL .102X19.43X26.95 ROADSIDE	1	EA
50	088017430	SPLASH PAN AL .102X19.93X26.95 CURBSIDE	1	EA
51	088017437	STRAP AL .125X2.98X25.76 ROADSIDE	1	EA
52	088017438	STRAP AL .125X2.98X25.76 CURBSIDE	1	EA
NS	44004077	SEAL TAPE #1458BTXFT	4.42	FT

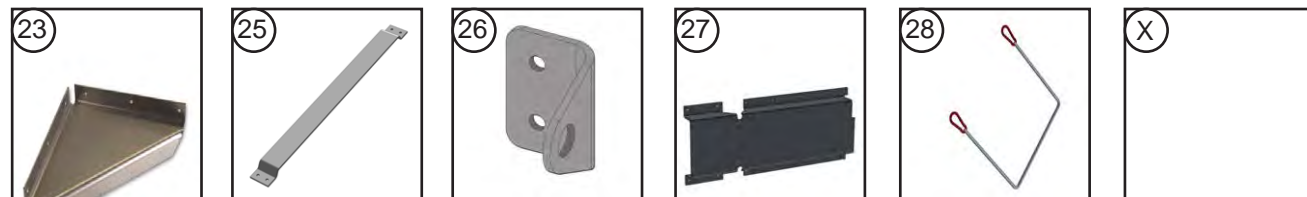
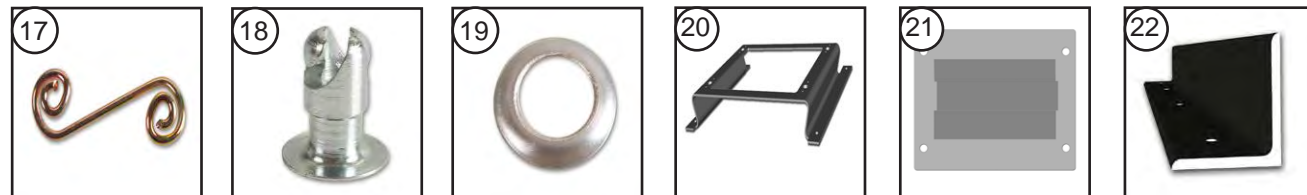
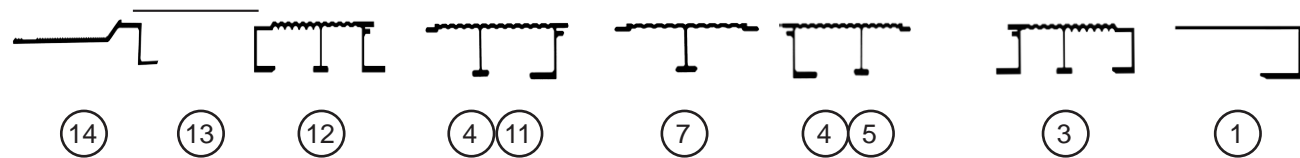
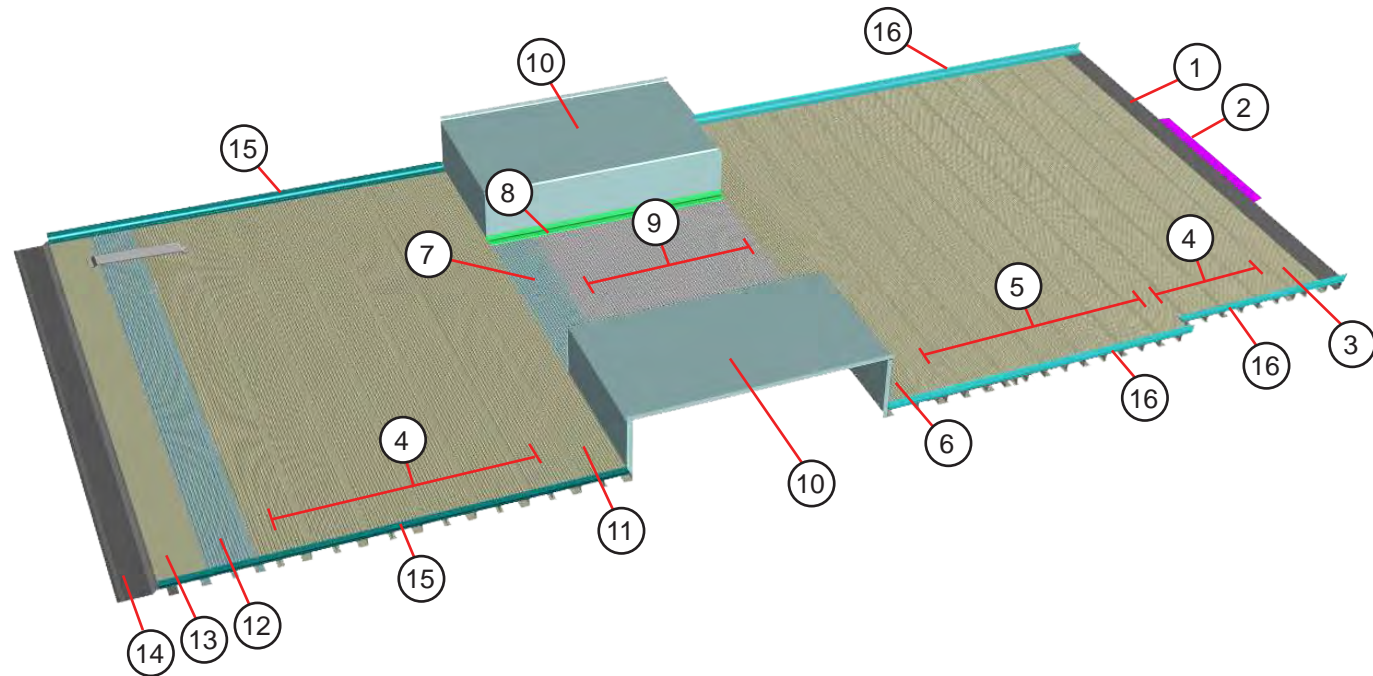


ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1		INSTRUMENT PANEL WELDMENT F59 W/DBL DIN RADIO	1	EA
2	47006613	CLIP PLASTIC BU/HD .5HEADX.94	4	EA
3	46026364	TIE WRAP MOUNTING PUSH-IN REAR	4	EA
4	46004416	GROMMET 1X.25X1.375	2	EA
5	125027413	BRACKET REINFORCEMENT I/P AL.102X4.32X11.31	1	EA
6	125027416	BRACKET MOUNTING AL .102X7.74X10.14	1	EA
7	093027402	BRACKET STIFFENER AL .125X1.91X12.66	1	EA
8	115027414	PLATE FACE IP AL .102X11.99X18.39	1	EA
9	115027401	IP CLUSTER MOUNT AL .102X3.36X14.5	1	EA
10	115027402	IP CLUSTER MOUNT AL .102X4.86X16.14	1	EA
11	115027407	BRACKET SPACER STL .25X3.14X5.45	1	EA
12	118027417	PLATE ROCKER SWITCH AL .102X2.50X8.75	1	EA
13	115027406	BRACKET LOCKING AL .125X2.78X4.95	1	EA
14	128027421	PLATE ACC COVER RADIO AL .102X9X11	1	EA
15	135093401	PLATE COVER I/P BACK AL .102X1X3	1	EA
16	46023506	PLUG BLACK ROCKER SWITCH PLATE	3	EA



ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	47002685	SEAT DRIVER	1	EA
	47012685	SEAT ONLY - WITHOUT 6" SLIDES	1	EA
2	47002686	SEAT BASE	1	EA
3	47011208	ARM REST ROADSIDE	1	EA
4	98M582030	BRACE SUPPORT STEEL 7GAX9.43X23.43	1	EA
5	47004365	SEAT BELT WITH BOOT ADJUSTABLE D O GANGE	1	EA
6	91614300	ANGLE FLOOR .188X2.84X19.1	1	EA
7	47002687	JUMP SEAT	1	EA
8	165069400	PLATE REINFORCEMENT JUMP SEAT	1	EA
9	47004365	SEAT BELT 7" ADJUSTABLE D ORANGE	1	EA





ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	083033509	BEAM @ O/LINE AL 450088X89.38	1	EA
2	001730412	ANGLE STEP 450187X32	1	EA

**FLOOR FORWARD**

3	45058302	BEAM AL FLOOR RIB FEM/LAP 7X89.25	1	EA
4	45058401	BEAM AL FLOOR RIB M/FEM 8X92.25	4	EA
5	45058603	BEAM AL FLOOR RIB M/FEM 9X92.25	6	EA
6	45058701	BEAM AL FLOOR RIB M/FEM 8.5X92.25	1	EA
16	45030300	ANGLE ATTACH FLOOR SIDE X241	.88	EA

**FLOOR MID**

7	05M241033	FLOOR RIB 8" W/BX 450585X40.5	1	EA
8	95869302	ANGLE W/BX ATTACH AL 450018X44	2	EA
9	45058600	BEAM AL FLOOR RIB M/FEM 9X81.25	2	EA
10	95869202	W/BX A 93W 10" DW AL .102 KBK	2	EA

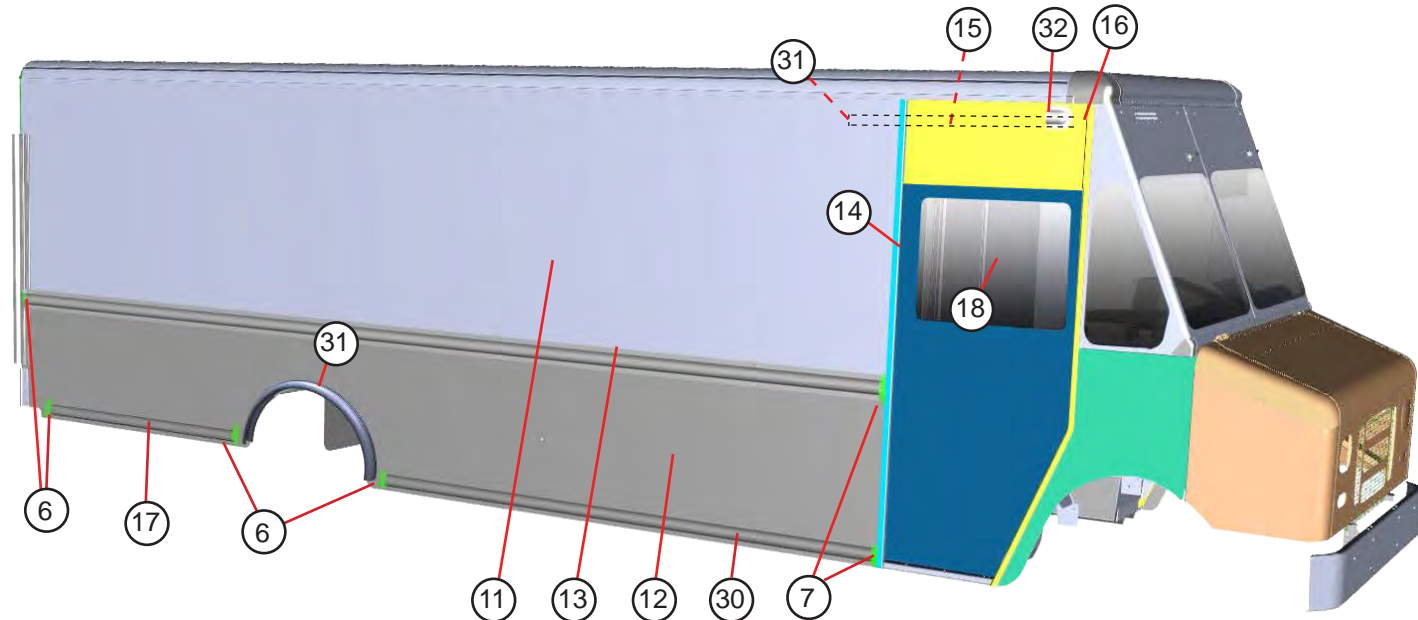
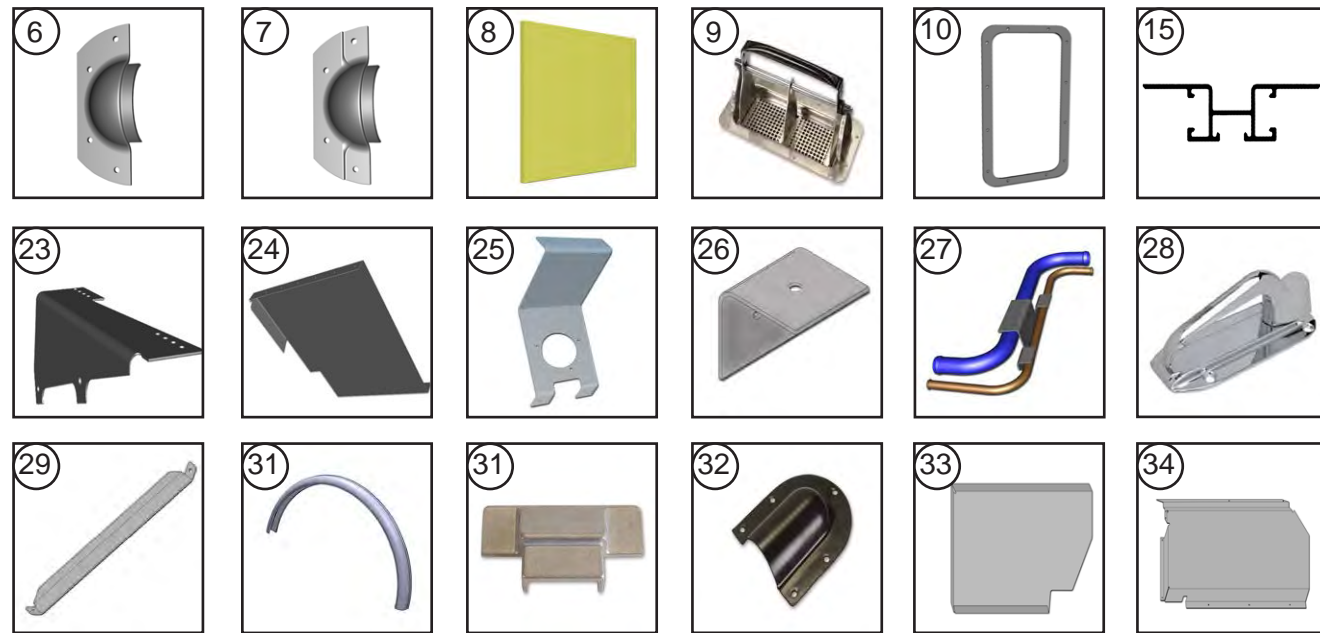
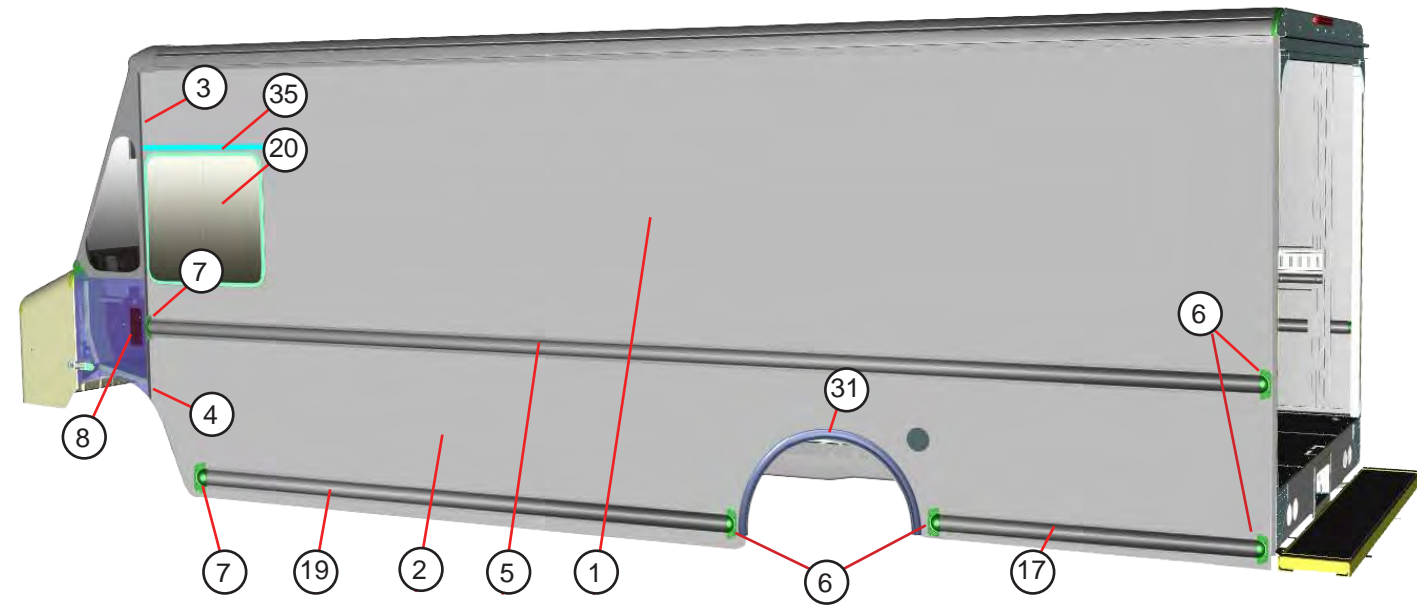
**FLOOR REAR**

11	45058701	BEAM AL FLOOR RIB M/FEM 8.5X92.25	1	EA
4	45058401	BEAM AL FLOOR RIB M/FEM 8X92.25	6	EA
12	45058303	BEAM AL FLOOR RIB FEM/LAP 7X92.25	1	EA
13	088033401	PLATE FILLER AL .125X6.68X92.38	1	EA
14	45059200	DROP SILL AL FLOOR 1.88X92.69 45 RMP	1	EA
15	45030300	ANGLE ATTACH FLOOR SIDE X241	.58	EA

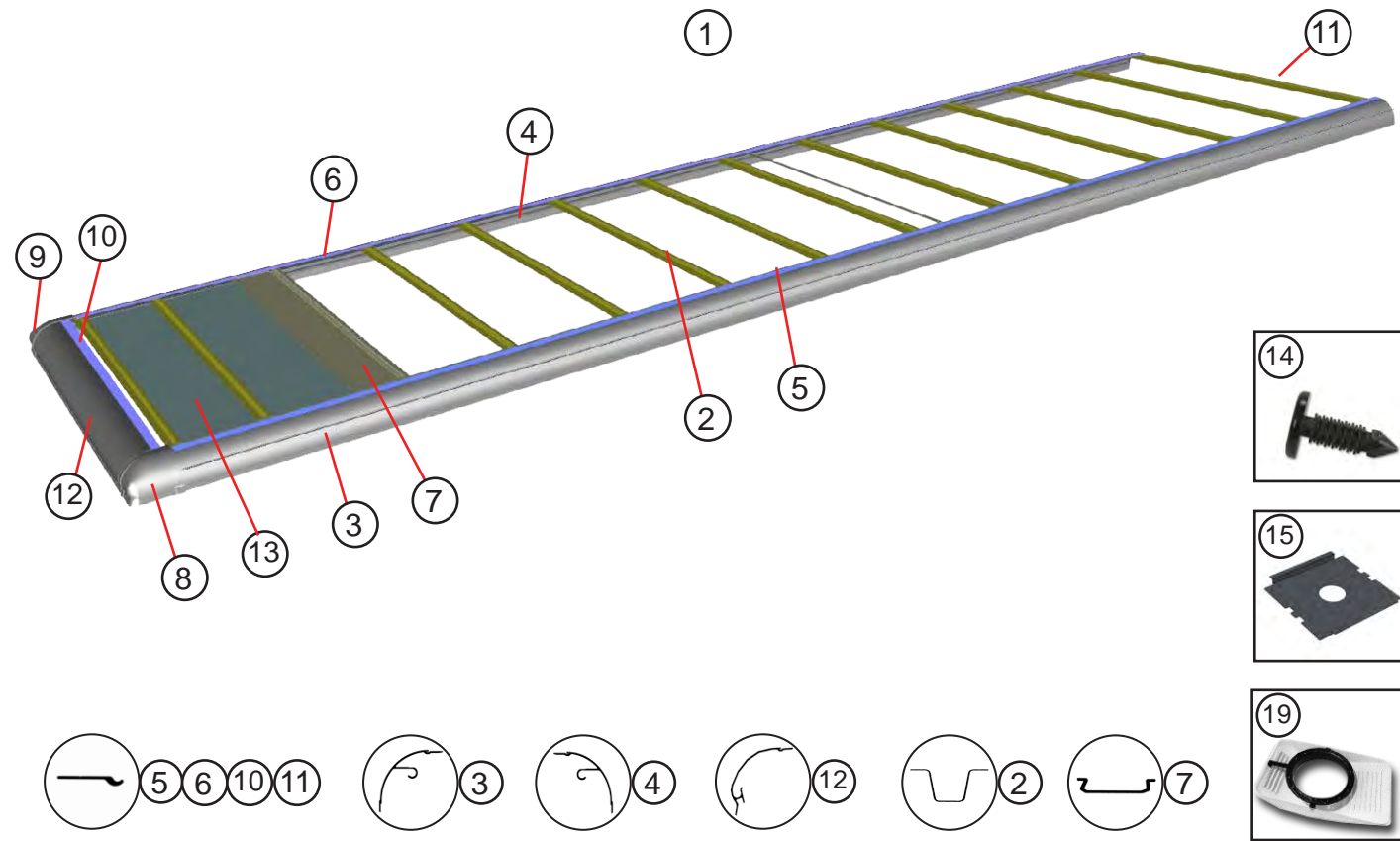
**ACCESS DOOR**

17	40900082	SPRING	4	EA
18	40900080	STUD	8	EA
19	40900081	GROMMET HALF	8	EA
20	125012400	SUPPORT ACCESS DOOR AL .125X12.22X17.59	1	EA
21	130032200	DOOR ACCESS WELDMENT	1	EA
22	150012400	ANGLE SUPPORT ACCESS DOOR AL450187X29	2	EA
23	7504176	GUSSET FLOOR TO SIDE AL .102X12.1X12.1	6	EA

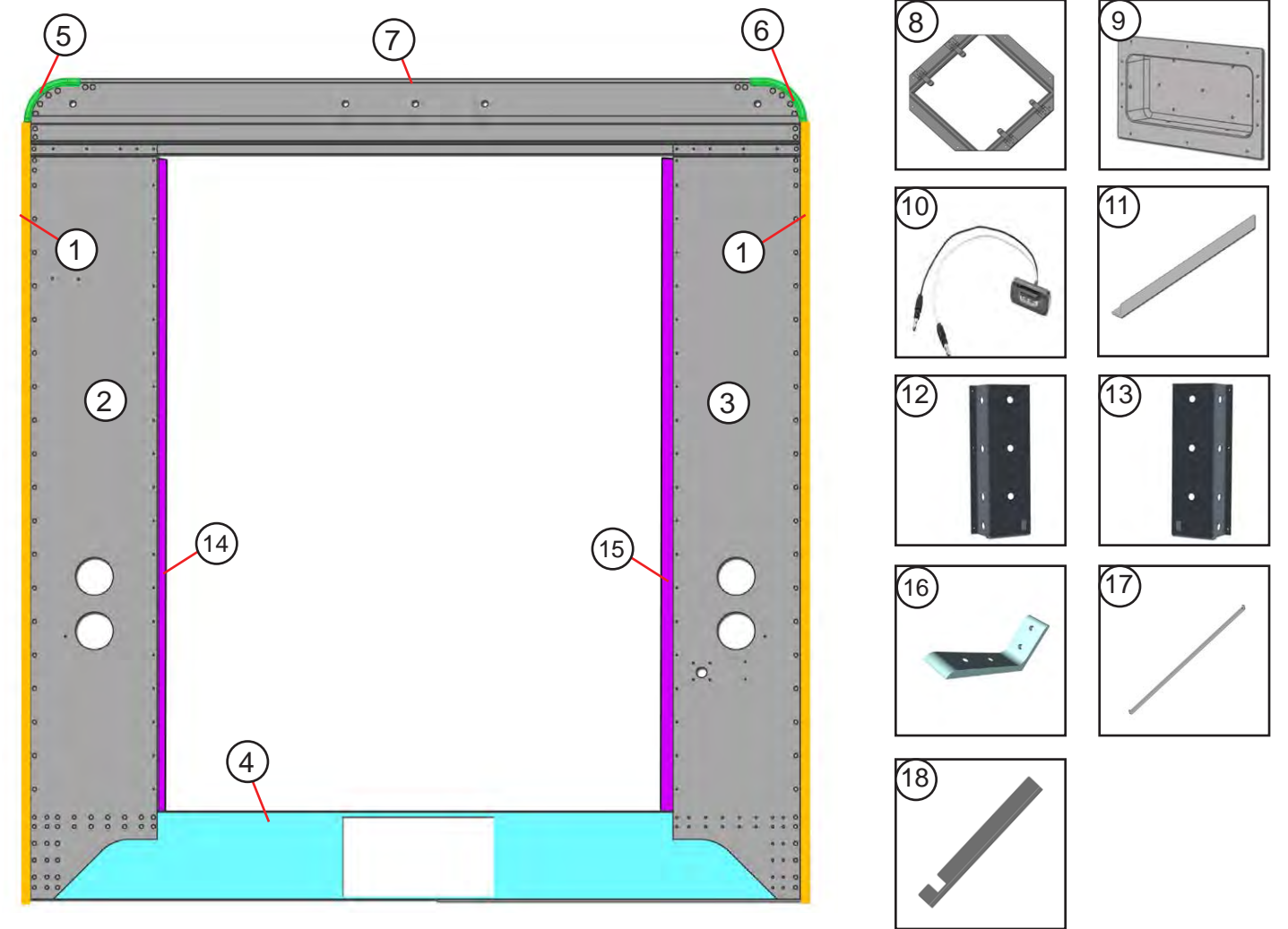
25	165127401	CATCH HAND CART STL 7GAX2X23.49	1	EA
26	150127456	BRACKET BUNGEE STL11GAX2X2.86	2	EA
27	165127402	BRACKET HAND CART HAT AL.125X13.16X23.88	1	EA
28	45400581	CRD BUNGEE 24" W/CARABINER HOOKS	1	EA



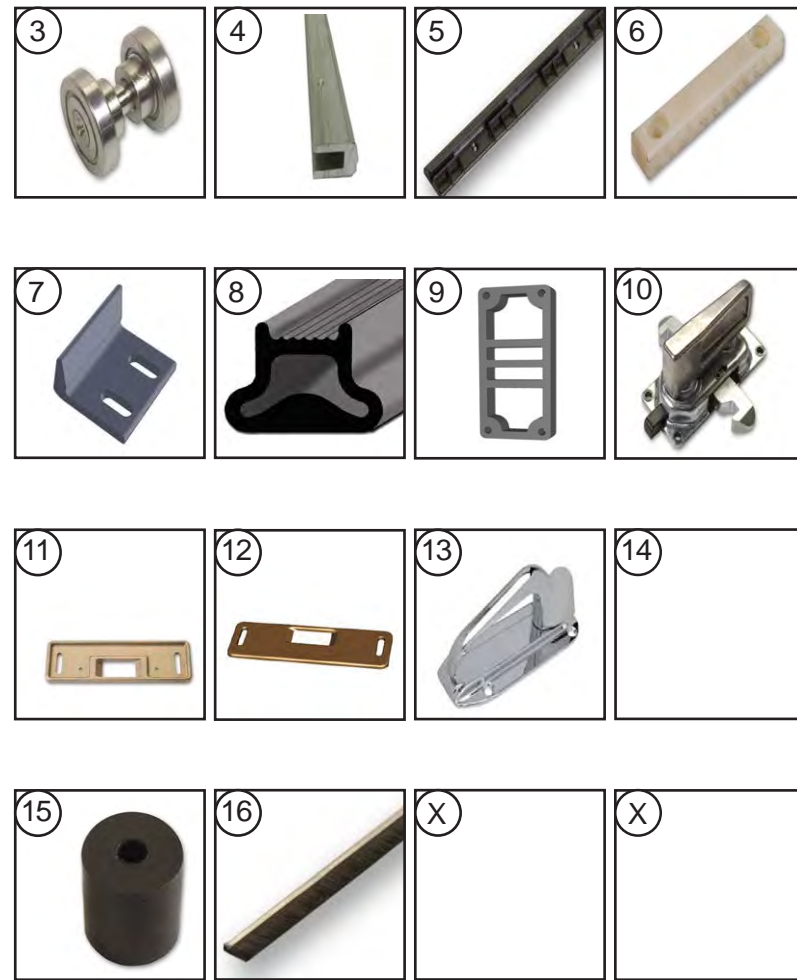
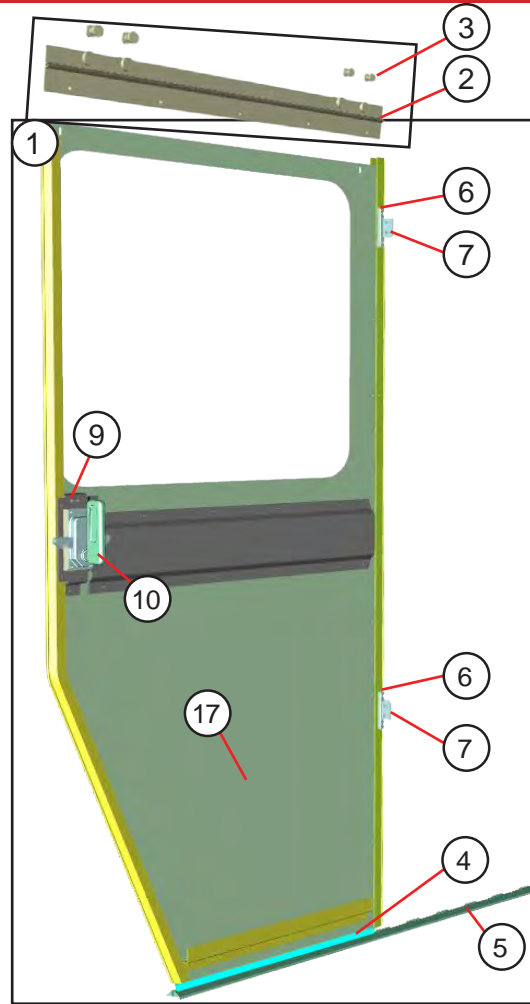
ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	177046401	SIDE UPPER AL .102X56X266.31 DLH	1	EA
2	177045402	SIDE LOWER AL .102X32X266.31 DLH	1	EA
3	088044404	DOOR POST TOP AL 456110X61.34 LH	1	EA
4	088044403	DOOR POST BOTTOM AL 456110X36.68 DLH	1	EA
5	088039329	RUB RAIL AL 450002X262.31 DLH	1	EA
6	1100799	END CAP RR FL AL .125X2.37X5.5	4	EA
7	1100800	END CAP FORWARD AL .125X2.37X5.5	2	EA
8	7600165	PLATE FILLER RUB RAIL AL .125X2.88X3	2	EA
9	47008545	VENT AL 2WAY HNGLS	1	EA
10	47008548	GASKET FOR VENT	1	EA
17	148039433	RUB RAIL LOWER REAR AL450002X62.32	2	EA
19	148039449	RUB RAIL LOWER FRONT AL 450002X119.5	1	EA
11	177038406	SIDE UPPER AL .102X56X225.31 RH	1	EA
12	177037438	SIDE LOWER AL .102X32X225.31 RH	1	EA
7	1100800	END CAP FORWARD AL .125X2.37X5.5	2	EA
13	088039307	RUB RAIL AL 450002X221	1	EA
14	077400403	POST "B" AL 450274X95.62 RH	1	EA
8	7600165	PLATE FILLER RUB RAIL AL .125X2.88X3	1	EA
6	1100799	END CAP REAR FL AL .125X2.37X5.5	4	EA
15	083042401	STIFFENER HEADER AL RH ( 165042400 - LH )	1	EA
16	96742302	CLIP AL Z .102X3X9.57	1	EA
31	45100074	CAP RAIL END	2	EA
32	47008533	VENT END CAP PLASTIC	2	EA
17	165039402	RUB RAIL LOWER REAR AL450002X49	1	EA
30	148039443	RUB RAIL AL 450002X95.32	1	EA
18	45800103	WINDOW SLIDING RH	1	EA
20	45800102	WINDOW SLIDING LH	1	EA
NS	093019408	STIFFENER ZEE BELOW WINDOW LH AL.07X7.59X16.19	1	EA
23	115012406	HANGER ANGLE EXT AL .07X6.6X12.96	1	EA
24	115012403	SPLASH PAN FUEL FILL AL .102X27.21X28.42	1	EA
25	115012402	BRACKET FUEL FILL MOUNT AL .102X4.5X13.66	1	EA
26	82312025	SUPPORT SPLASH PAN AL .07X1.5X2.84	1	EA
27	115012400	FUEL FILL EXTENSION F-59	1	EA
28	47001326	HANDLE NON LOCKING POWER COAT SILVER	1	EA
29	001744400	GUSSET FLOOR TO SIDE STRAP AL .125X2.1X16.02	6	EA
31	66104047	FENDER RUBBER REAR	2	EA
33	093019417	PANEL LNR BELOW WINDOW LH AL.102X31.57X38.46 DLH	1	EA
34	093019410	PANEL LNR ABOVE WINDOW DLH AL.07X23.11X45.35	1	EA
35	89367380	DRIP RAIL OVER WINDOW AL 450006X35.32	1	EA
NS	093019413	PANEL LNR ABOVE WINDOW AL .07X15.48X44.17 RH	1	EA
NS	1109001	INSULATION FBG	2.5	FT
NS	165040000	EXTENTION HANGER EXHAUST PIPE	1	EA
NS	40300930	"U" BOLT 11GA 3.5" HANGER	1	EA



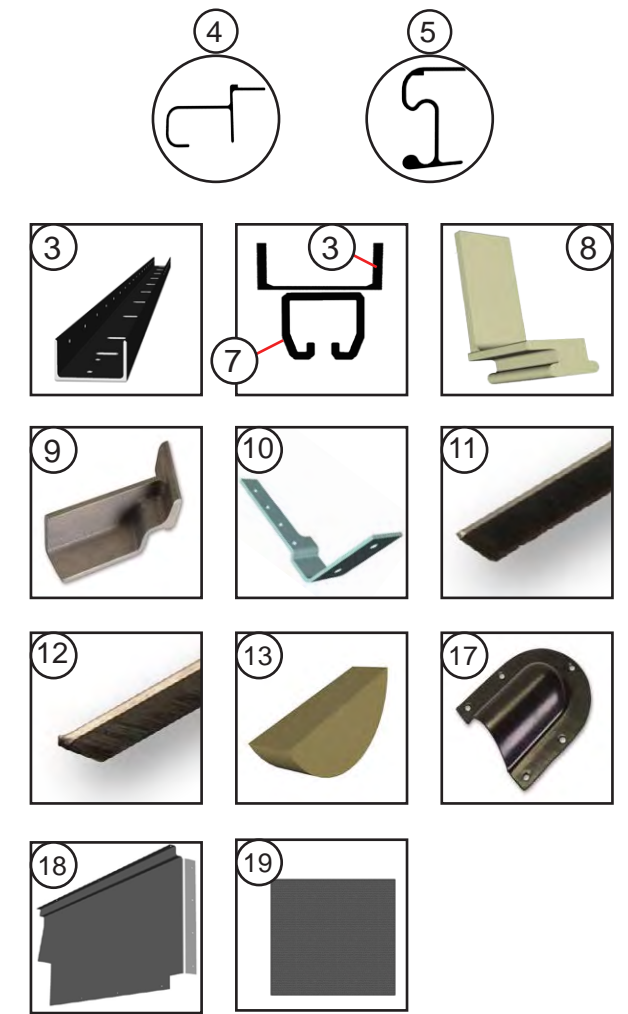
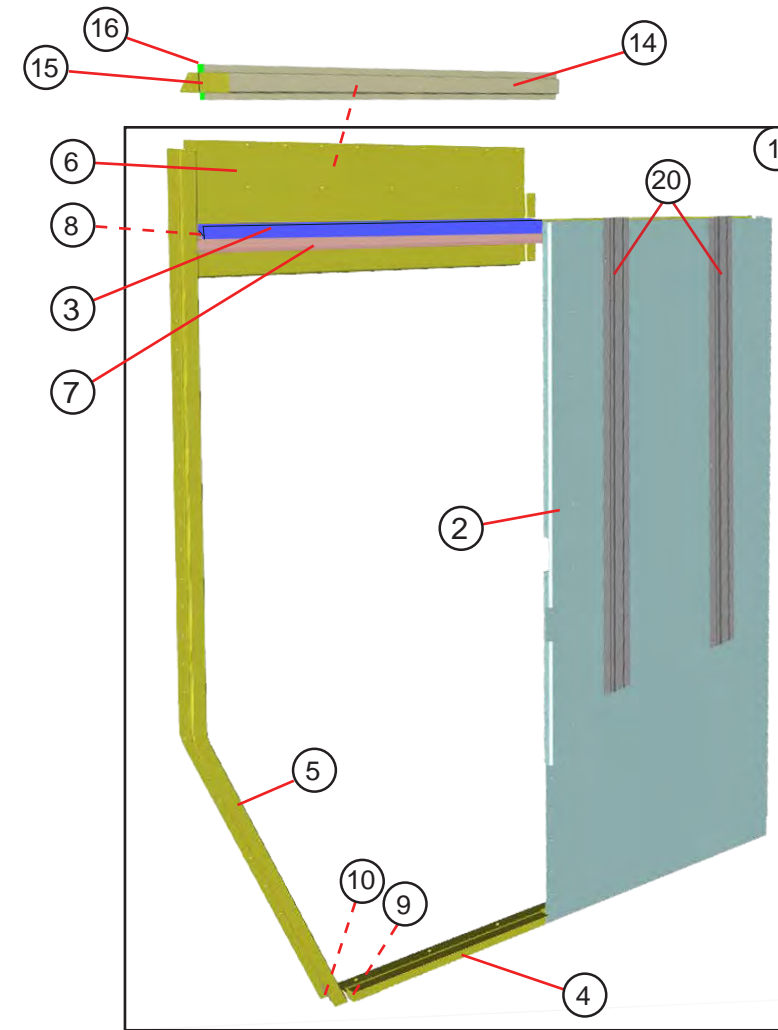
ITEM #	PART #	DESCRIPTION	QTY	UNIT
<b>ROOF ASSEMBLY 22' 93W</b>				
2	45601603	ROOF BOW STEEL 16GA SEC456016 X89.12	11	EA
3	098010413	ROOF RAIL 18' 456144X261.25 ROADSIDE	1	EA
4	098010414	ROOF RAIL 18' 456144X261.25 CURBSIDE	1	EA
5	088010516	RAIL INTERLOCK ROADSIDE	1	EA
6	088010517	RAIL INTERLOCK CURBSIDE	1	EA
7	118010402	ROOF BEAM @ O LINE	1	EA
8	077100400	CORNER CASTING ROADSIDE	1	EA
9	077100401	CORNER CASTING CURBSIDE	1	EA
10	89310506	NOSE ROOF INTERLOCK	1	EA
11	89310507	ROOF INTERLOCK TRANSOM	1	EA
12	083010400	ROOF NOSE	1	EA
13	083011470	ROOF LINER	1	EA
14	47006610	CLIP PLASTIC FLAT HEAD	56	EA
15	7909009	PLATE REINFORCEMENT VENT	1	EA
NS	45200851	ROOF SKIN FBG .075X82.25XFT	21.98	FT
19	1114110	VENT ROOF 80CFM	1	EA
NS	1114150	VENT REG 8"	1	EA
NS	47012700	SPACER RING VENT	1	EA



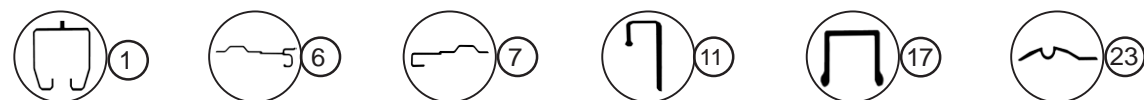
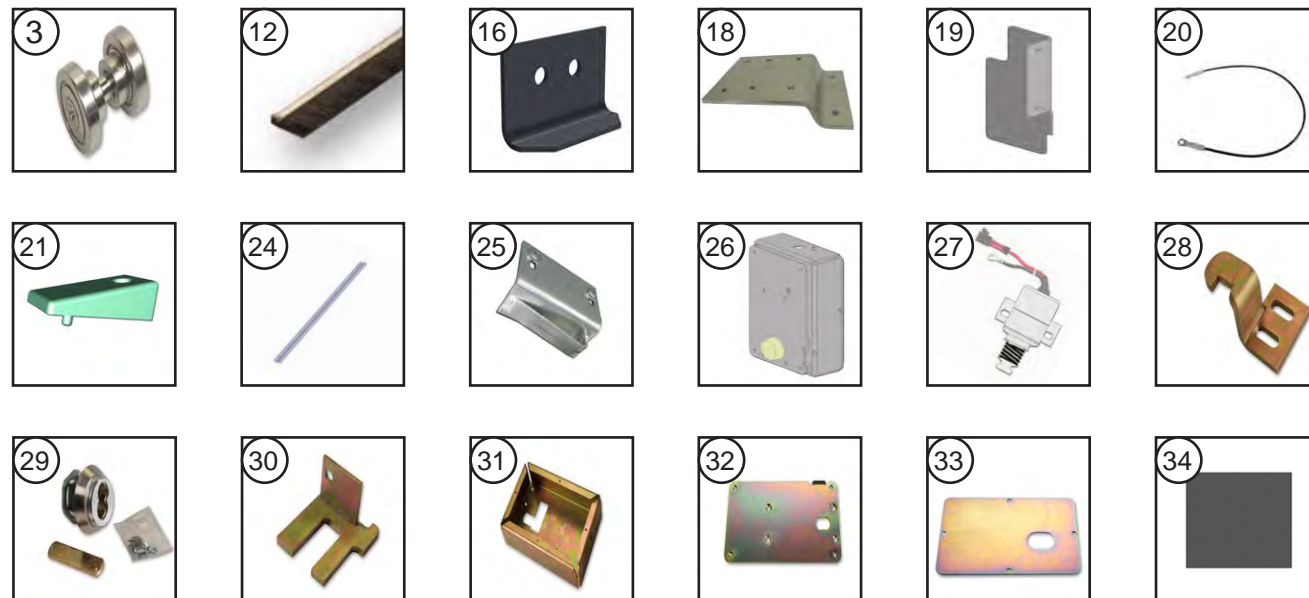
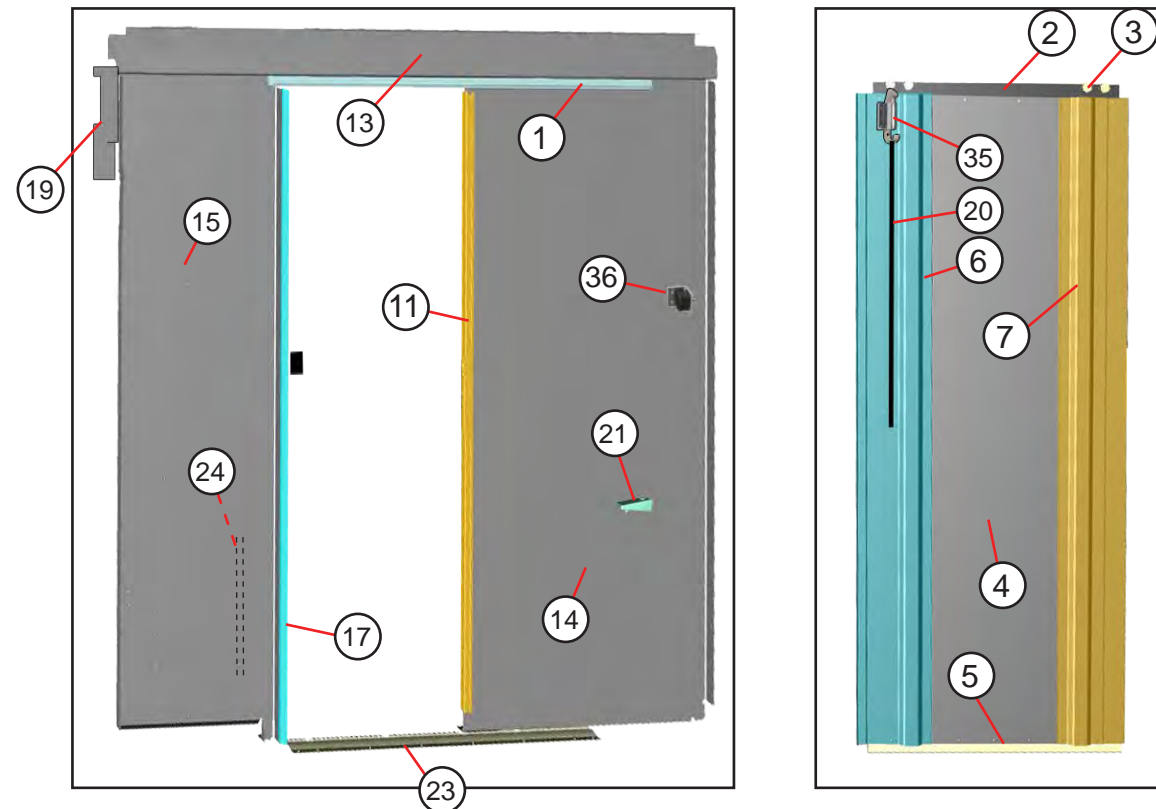
ITEM #	PART #	DESCRIPTION	QTY	UNIT
1	083053452	CHANNEL POST CORNER AL 450359X88.69	2	EA
2	175053402	PANEL BACK AL .102X15.14X86.04 LH	1	EA
3	175053403	PANEL BACK AL .102X15.14X86.04 RH	1	EA
4	083053603	SILL REAR 93W AL 450024X88.75	1	EA
5	45100009	CORNER CASTING LH	1	EA
6	45100010	CORNER CASTING RH	1	EA
7	083053401	TRANSOM REAR ROLL UP DOOR AL 450266X91.62	1	EA
8	43001401	PLACARD HOLDER	4	EA
9	140092400	BOX LICENSE PLATE	1	EA
10	47009642	LAMP MARKER CLEAR	1	EA
11	79885033	ANGLE SUPPORT LICENSE PLATE 450184X21.56	1	EA
12	175081400	GUARD TAIL LAMP AL .07X12.81X29.24 LH	1	EA
13	175081401	GUARD TAIL LAMP AL .07X12.81X23.37 RH	1	EA
14	97024200	JAMB DOOR POST ASSEMBLY LH	1	EA
15	97024201	JAMB DOOR POST ASSEMBLY RH	1	EA
16	90650309	ANGLE CLIP AL 450192X.88	2	EA
17	165135400	PLATE FILLER BACK AL .125X2.23X97.21	1	EA
18	175127400	WIRING COVER @ TRANSOM AL .102X7.04X58.94	1	EA



ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	118060201	SIDE DOOR ASSEMBLY	1	EA
2	96760307	HANGER AL 450515X40.09	1	EA
3	47006595	BEARING ROLLER	4	PR
4	98760306	WEAR STRIP DOOR BOTTOM 450008X25.75	1	EA
5	47002766	GUIDE DOOR NYLON	1	EA
6	45200206	SPACER ANTI RATTLE	2	EA
7	45300377	CLIP ANTI RATTLE	2	EA
8	44004104	SEAL RUBBER RS FORWARD	1	EA
9	087181	SPACER LATCH	1	EA
10	1113016	LATCH	1	EA
11	45100093	STRIKER BRONZE CAST D/S RR	2	EA
12	45100163	STRIKER BRONZE CAST D/S RR		
13	47001326	HANDLE POWDER COAT SILVER	1	EA
14				EA
15	44002011	RUBBER BUMPER	1	EA
16	44008050	SEAL BRUSH TYPE B 1X83.9	1	EA
17	118060403	PANEL LOWER DOOR	1	EA



ITEM #	PART #	DESCRIPTION	QTY.	UNIT
2	178041454	PANEL DOOR POCKET AL .102X42.28X87.66 RH	1	EA
3	96741303	CHANNEL HEADER AL 450256X75 RH	1	EA
4	98741353	NOSE STEP AL 450247X61.29 RH	1	EA
5	077410403	DOOR POST AL 450294X100 RH	1	EA
6	077410407	PANEL HEADER AL .102X15.49X42.37 RH	1	EA
7	96741202	TRACK ASSEMBLY UPPER	1	EA
8	45100049	GUSSET HEADER CHANNEL TO DOOR POST	1	EA
9	45100105	DOOR POST CASTING LOWER	1	EA
10	001741408	REINFORCEMENT BRACKET AL.125X1.53X8.04 RH	1	EA
11	44004060	SEAL BRUSH TYPE C 1.5X82	1	EA
12	44008050	SEAL BRUSH TYPE B 1X83.9	1	EA
13	45900001	PLUG WD RUBRAIL .75X1.12X2.9	1	EA
14	083042401	STIFFENER HEADER AL450328X73.75 RH	1	EA
15	96742302	CLIP AL Z .102X3X9.57	1	EA
16	45100074	CAP RAIL END (OPTIONAL)	1	EA
17	47008533	VENT CAP PLASTIC (OPTIONAL)	1	EA
18	123019405	PANEL LINER HEADER AL.07X19.48X50.57 RH	1	EA
19	47009600	CARPET GRAY BLACHFORD	2	FT
20	155048418	STIFFENER AL 459919X66.75	2	EA
NS	158041201	DRIP EDGE WELDMENT ASSEMBLY	1	EA



ITEM #	PART #	DESCRIPTION	QTY	UNIT
1	088070256	TRACK DOOR ASSEMBLY	1	EA
2	088070522	PLATE HANGER W/BRUSH AL 450515X30.63	1	EA
3	47006595	BEARING ASSEMBLY	4	PR
4	175070408	PANEL DOOR BULKHEAD AL .125X27.88X75.25	1	EA
5	088070524	WEAR STRIP BHD 452002X32.25	1	EA
6	175070406	BULKHEAD EDGE AL 450504X75.25 CURBSIDE	1	EA
7	167070401	BULKHEAD EDGE AL 450503X75.25 ROADSIDE	1	EA
11	175070407	CHANNEL BHD UPPER AL 450502X74.15	1	EA
12	44008050	SEAL BRUSH TYPE B x83.9	1	EA
13	175070411	HEADER BHD ZEE AL .102X6.77X92.4	1	EA
14	175070403	PANEL BHD AL .102X37.61X79.42 LH	1	EA
15	175070404	PANEL BHD AL .102X24.16X79.42 RH	1	EA
16	175070412	PULL HANDLE AL .102X2.76X3	1	EA
17	167070409	JAMB AL 450326X76.44	1	EA
18	92537309	PLATE MOUNTING LATCH AL .125X3X5.29	1	EA
19	175070405	PLATE FILLER UPPER AL .102X3.63X10.25 RH	1	EA
20	1113600	CABLE BULKHEAD .125X29" BLACK VINYL	1	EA
21	45200208	DOOR CHOCK NYLON	1	PR
23	96770316	GUIDE DOOR FLOOR AL 450414X47.88	1	EA
24	083069404	STIFFENER BULKHEAD @ JUMPSEAT AL 450043X72.12	1	EA
25	98770202	STRIKER WELDMENT BHD ASSEMBLY	1	EA
26	090127200	LATCH BULKHEAD ASSEMBLY	1	EA
27	46032317	SOLENOID KEYLESS 12V W/SPRING	1	EA
28	001761437	LATCH STRIKER BULKHEAD STL .25 YL DICHR	1	EA
29	001285406	CYLINDER LOCK W/SPECIAL CAM	1	EA
30	001285226	BAR STRIKER ASSEMBLY	1	EA
31	001285430	HOUSING STEEL LAT 11GAX11.88X15.5	1	EA
32	001285425	PLATE BULKHEAD LATCH 11GAX5.76X9.38	1	EA
33	001285426	PLATE BULKHEAD LATCH 11GAX5.76X9.38	1	EA
34	47009600	CARPET GRAY	18.5	FT
35	1113046	LATCH FINGER PULL	1	EA
36	5903152	DOOR STOP	1	EA

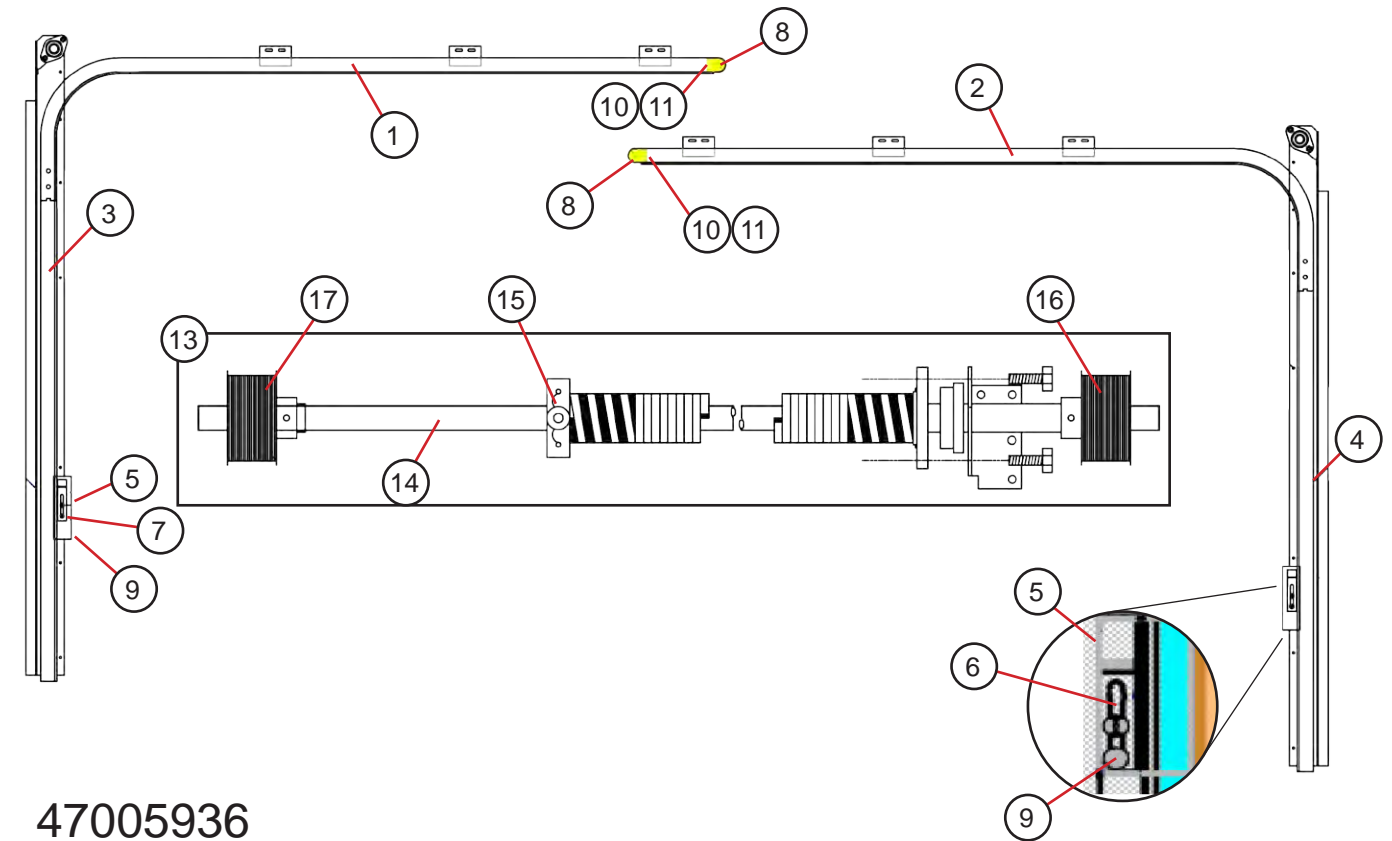
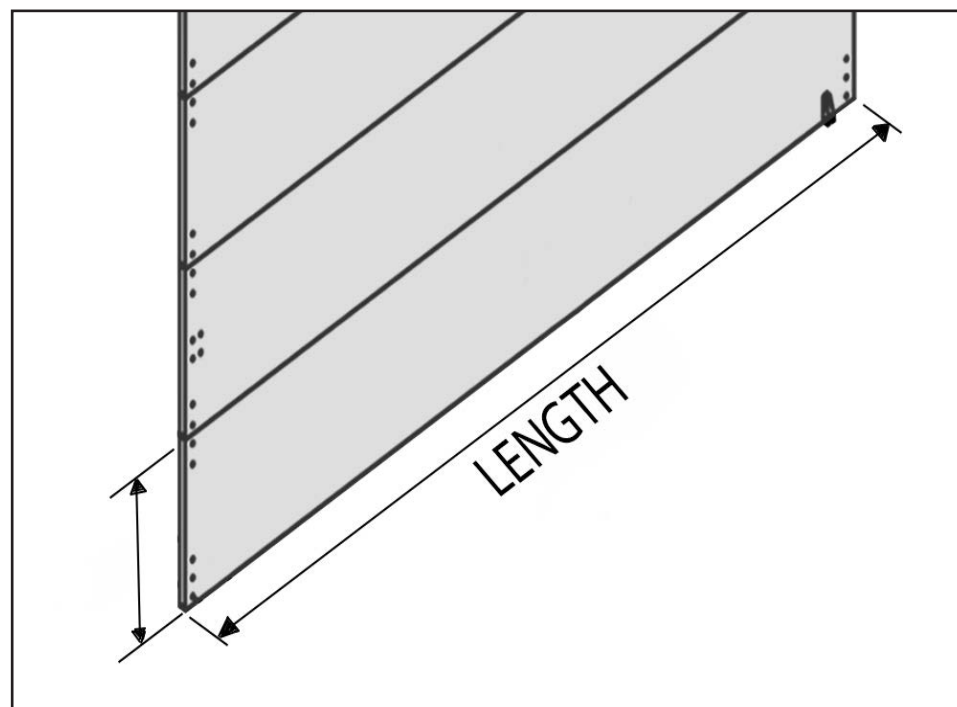


ROLL-UP DOOR SERIAL NUMBER LOCATION

WHEN ORDERING PARTS FOR ROLL-UP DOORS,  
PLEASE PROVIDE THE FOLLOWING INFORMATION.

THE SERIAL NUMBER LOCATED ON THE INTERIOR TOP PANEL ROADSIDE EDGE.  
THE LENGTH AND HEIGHT OF THE DOOR PANEL(S) TO BE ORDERED.

IN THE EVENT OF A DAMAGED, UN-READABLE OR MISSING SERIAL NUMBER,  
PLEASE TRY TO PROVIDE THE COMPOSITION DETAILS OF THE DOOR PANEL.  
(PLASTIC PANEL (WEATHERTITE), ALUMINUM CLAD, PLYWOOD, ETC.)

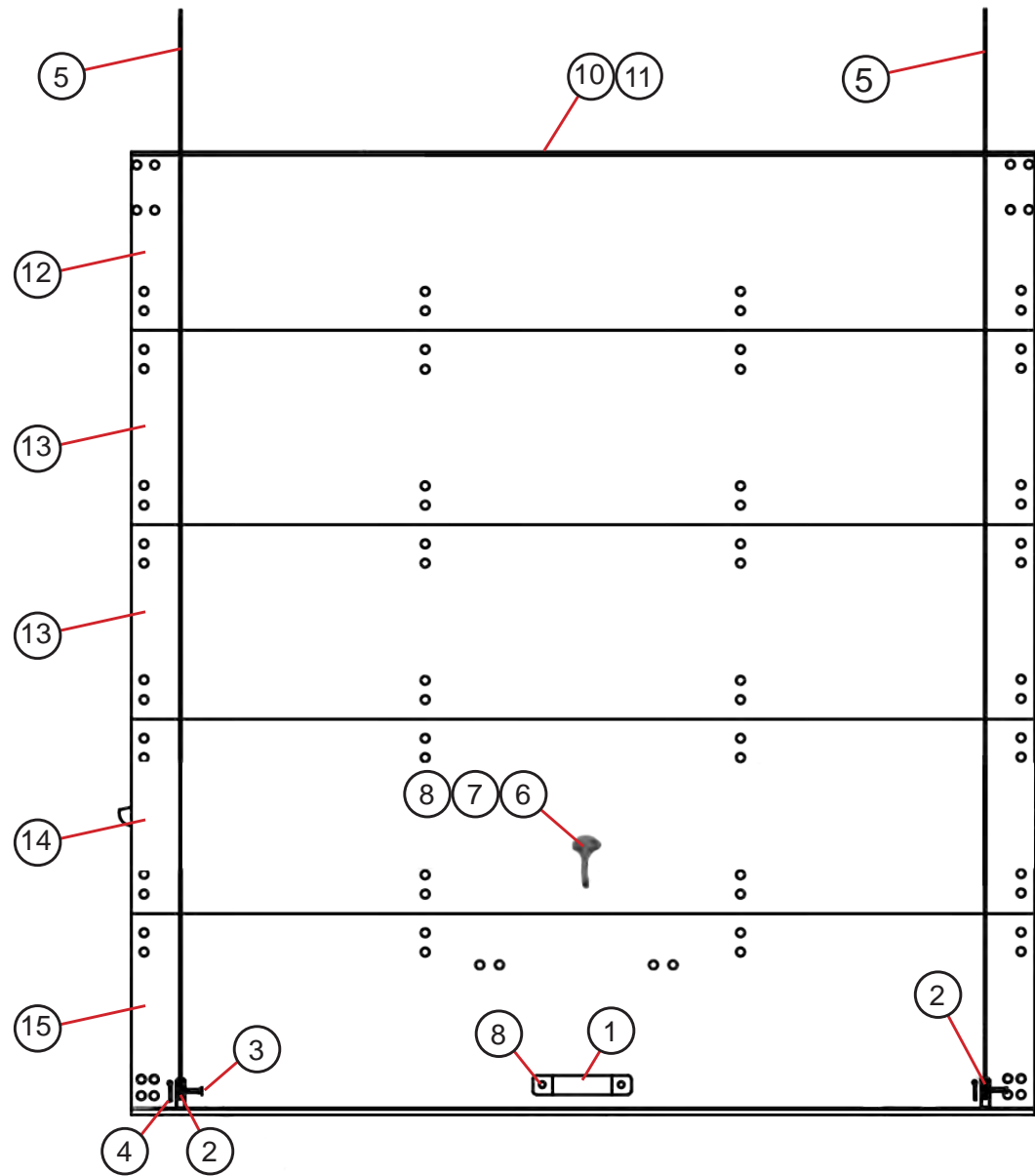


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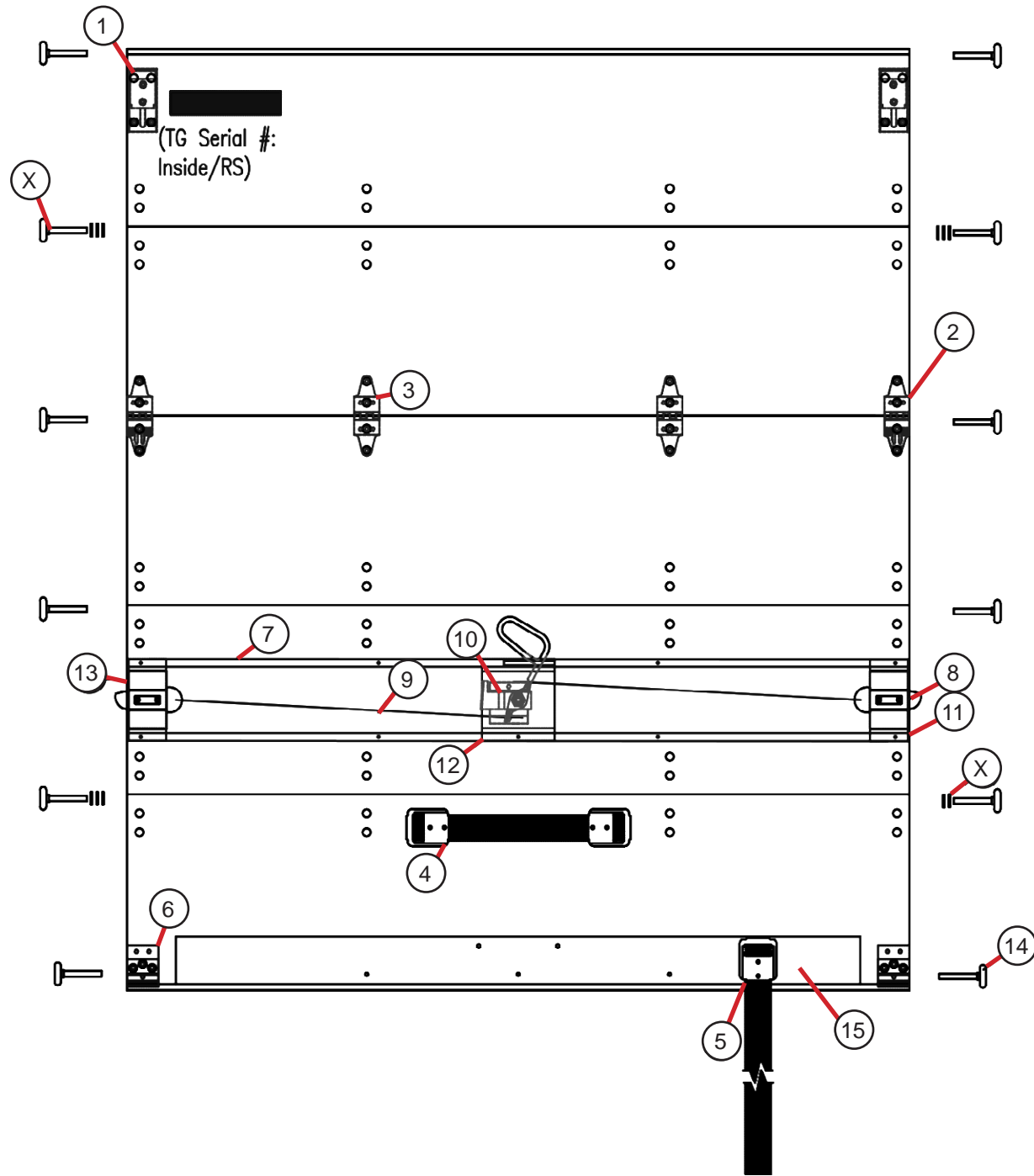
ITEM#	PART#	DESCRIPTION
1	47106850	HORIZONTAL TRACK ASSEMBLY - CURBSIDE
2	47106853	HORIZONTAL TRACK ASSEMBLY - ROADSIDE
3	47106854	VERTICAL TRACK ASSEMBLY - CURBSIDE
4	47106855	VERTICAL TRACK ASSEMBLY - ROADSIDE
5	47106740	LOCK CATCH
6	47106758	CATCH MOUNTING PLATE - LH
7	47106759	CATCH MOUNTING PLATE - RH
8	47106787	2" YELLOW HEAD PROTECTOR
9	47106744	5/16-18 KEEP NUT
10	47106746	1/4-20 KEEP NUT
11	47106788	1/4-20 X 2-1/2 HEX HEAD BOLT

**Counterbalance Assembly**

13	47106857	COUNTERBALANCE ASSEMBLY
14	47106862	COUNTERBALANCE SHAFT - 62"
15	47106858	SPRING W. PLUGS .192 SQ WIRE X 2.50 X 27.50 (RH)
16	47106753	CABLE DRUM LH (HEX HEAD SET SCREWS)
17	47106754	CABLE DRUM RH (HEX HEAD SET SCREWS)

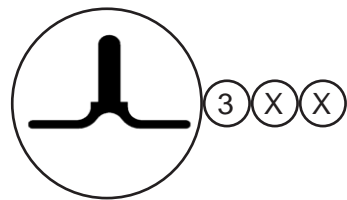
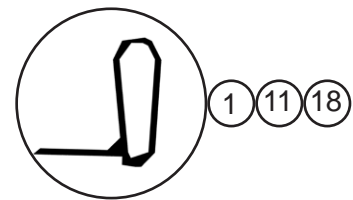
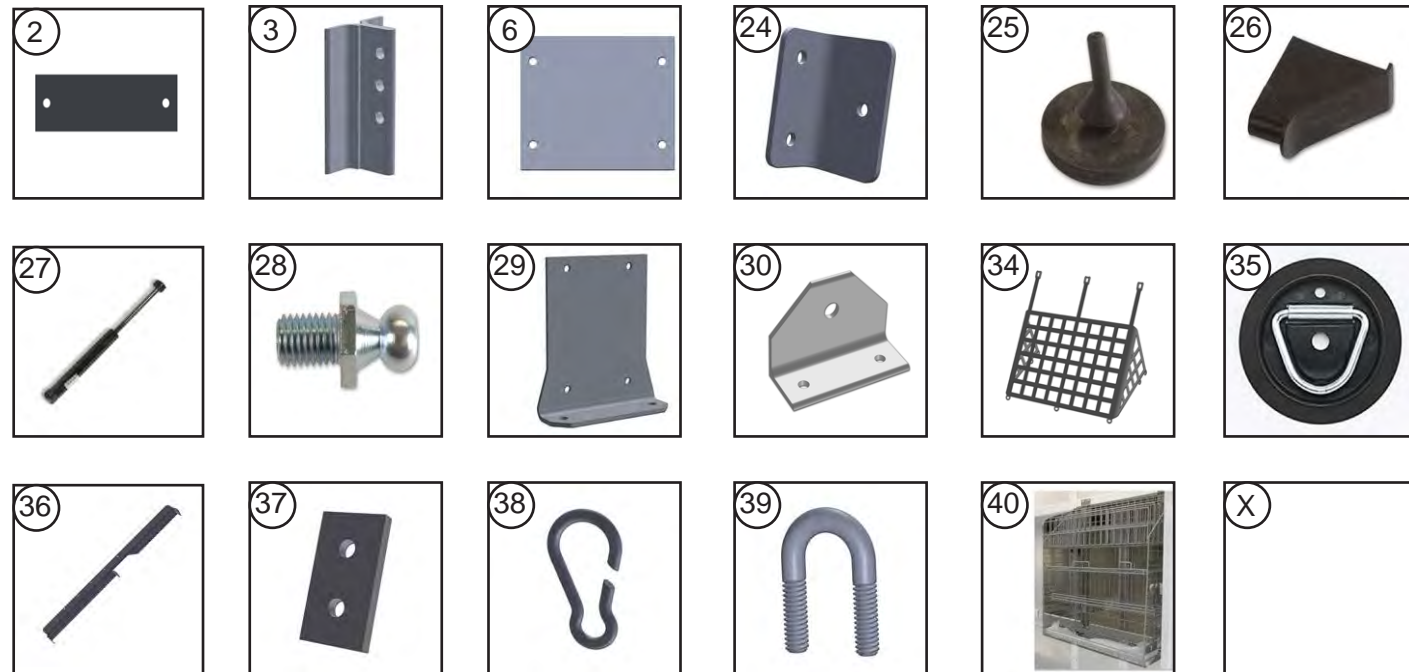
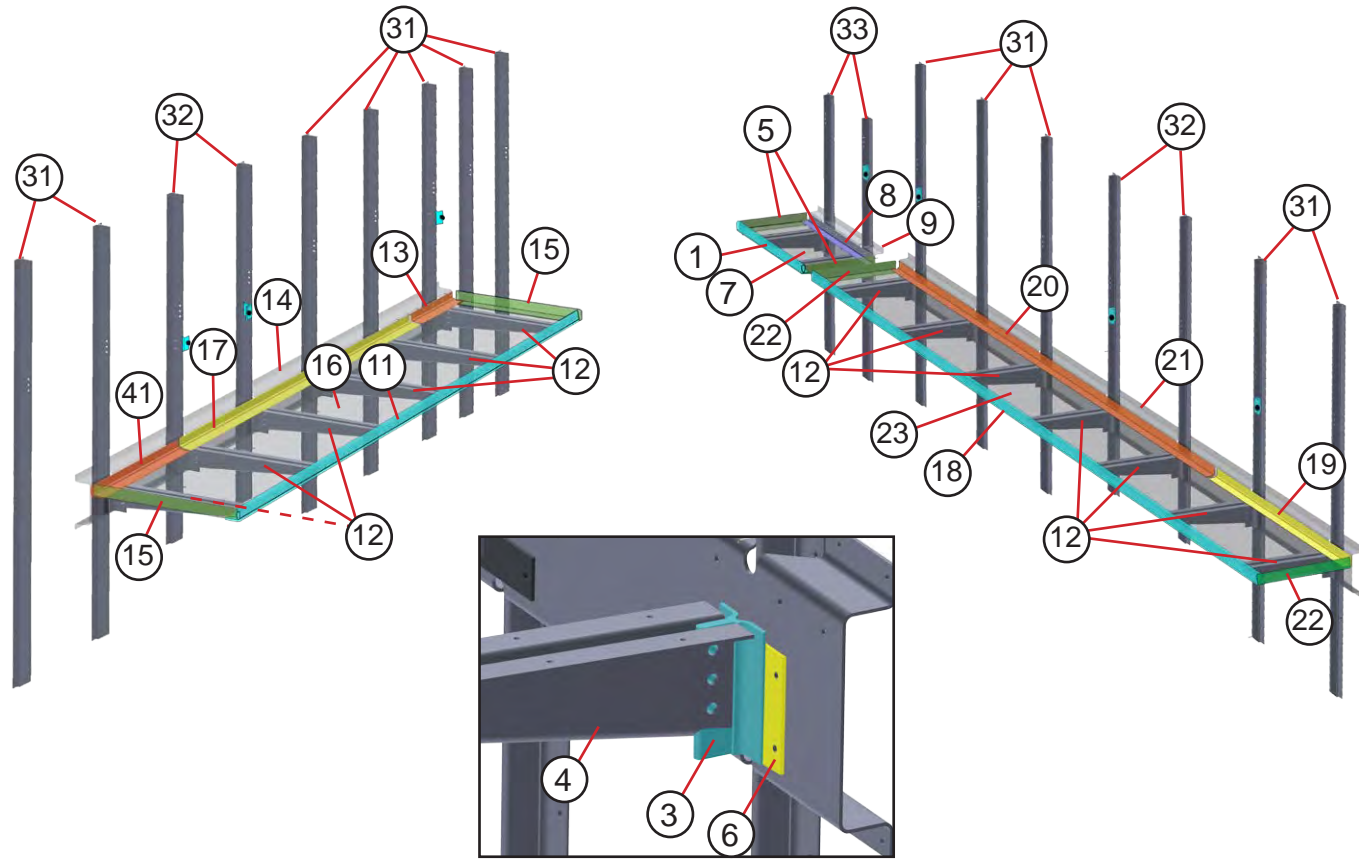


ITEM #	PART #	DESCRIPTION
1	47106796	LIFT HANDLE - BLACK
2	47106762	BRACKET CABLE ANCHOR
3	47106706	PIN CABLE ANCHOR BRACKET
4	47106719	COTTER PIN
5	47106727	CABLE SS 95" METAL EYE
6	47106774	L-HANDLE, NON-KEYED
7	47106783	10-24 X 1" SS SCREW
8	47106784	10-24 SS NYLOK NUT
9	47106802	60 INCH PULL STRAP NO-LOOP
10	47106829	TOP PANEL SEAL RETAINER
11	47106830	TOP PANEL SEAL - EXTENDED LIP
12	47106852	1/4" COMPOSITE PANEL TOP
13	47106851	1/4" COMPOSITE PANEL INTERMEDIATE X2
14	47106849	1/4" COMPOSITE LATCH PANEL
15	47106848	1/4" COMPOSITE PANEL BOTTOM

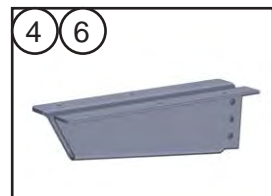
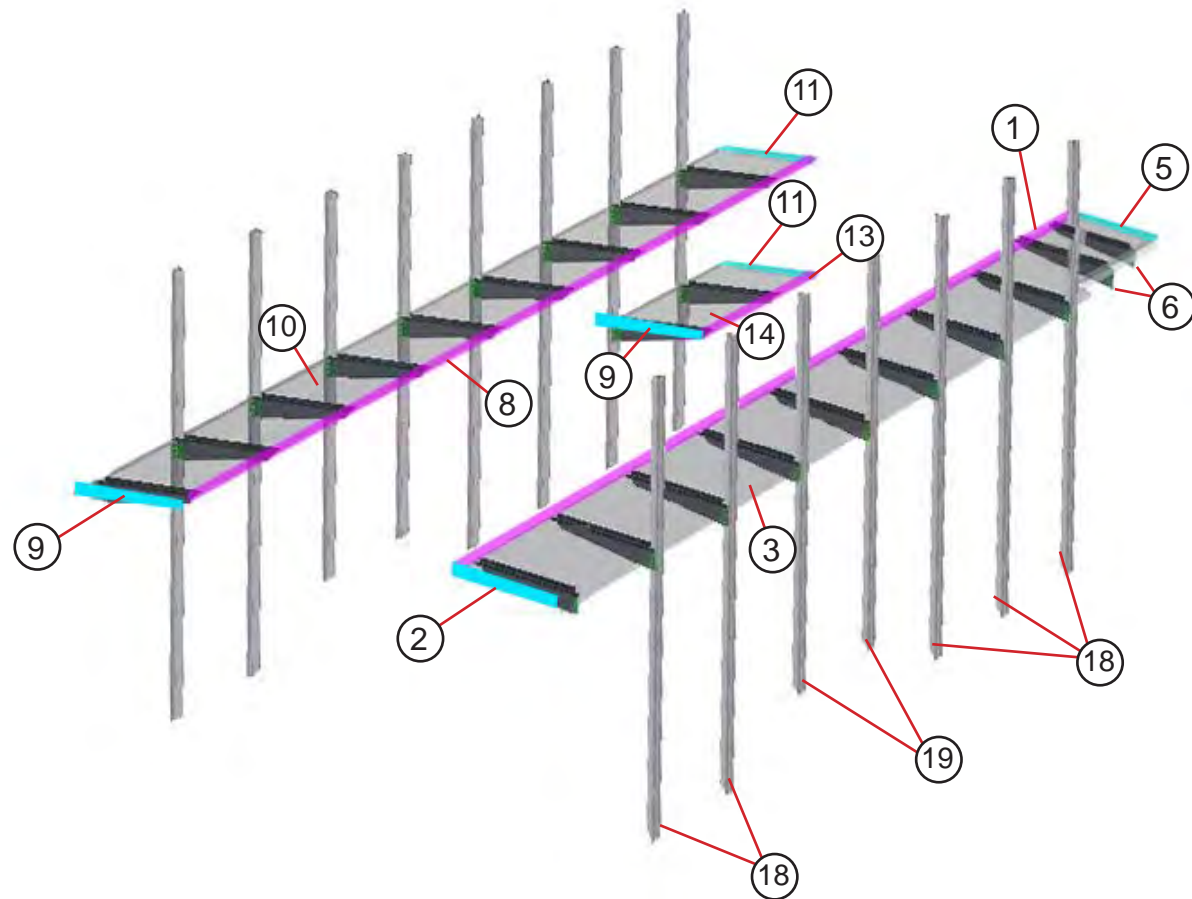


ITEM#	PART#	DESCRIPTION
1	47106710	Top Closure Complete
2	47106775	End Hinge Assembly
3	47106731	Center Hinge
4	47106837	12" Pull Strap, No Loop - 2 BLK Retainers
5	47106802	60" Pull Strap, No Loop
6	47106764	Bottom Roller Bracket Assm, 2" roller
7	47106847	Cable Cover w/ Studs - 62" Length
8	47106717	2 PT End Latch - RS
9	47106860	Cable Assembly, 2 PT Lock w/ 2 Stops & Washer
10	47106891	2-PT Center Control with D Handle
11	47106836	Latch Base End - .91" Off, PVC/Wood/13mm Comp, 2" Track
12	47106767	Latch Base Center - .91" Off, PVC/Wood/13mm Comp, 2" Track
13	47106716	2 PT End Latch - CS
14	47106765	2" HD Solid Steel Roller
15	47106861	Black 56" long Bottom Angle for .25" Composite w/ inside PS
NS	47106724	5/8" Stainless Steel Rivet
NS	47106725	3/4" Stainless Steel Rivet
NS	47106726	7/8" Stainless Steel Rivet
NS	47106720	11/16" Aluminum Buck Rivet
NS	47106721	13/16" Aluminum Buck Rivet

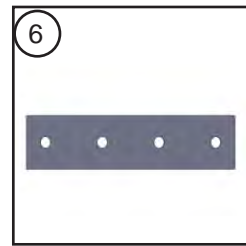
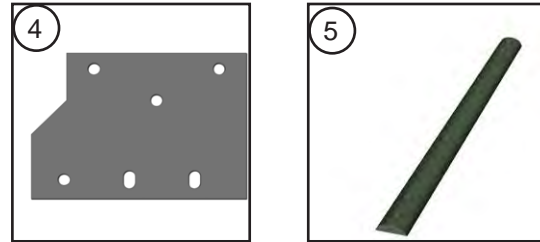
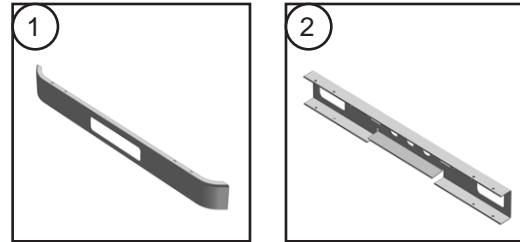
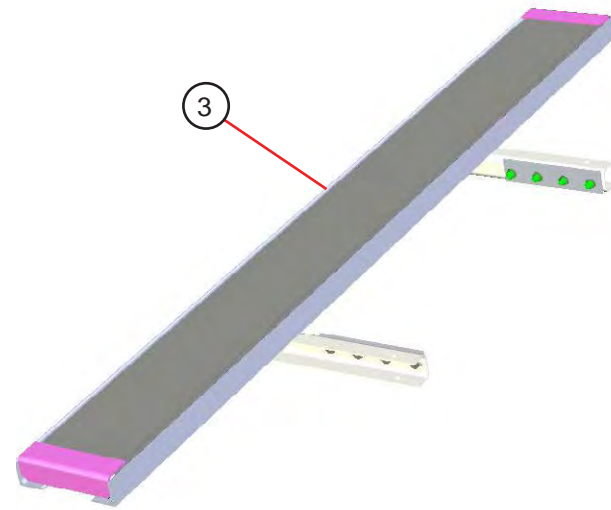
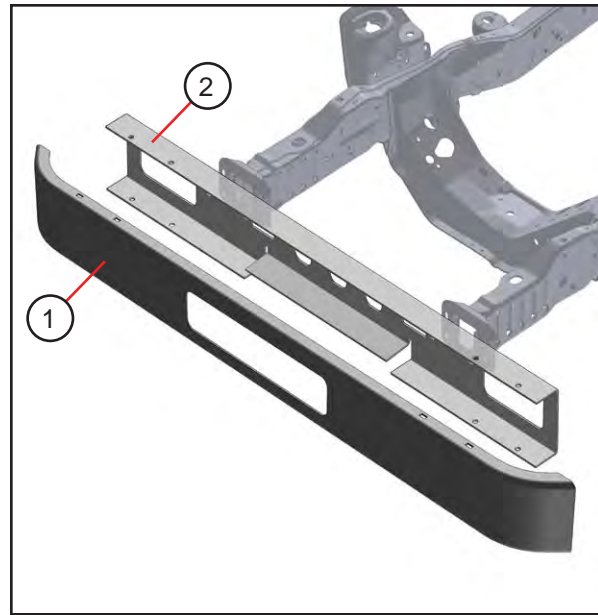




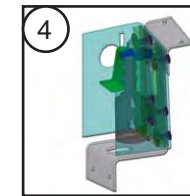
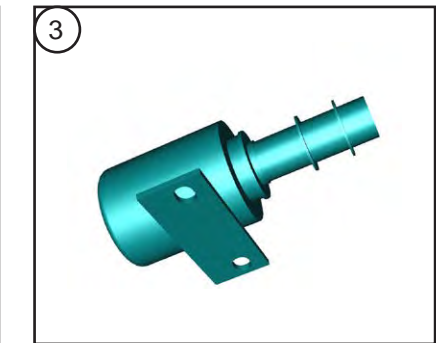
ITEM#	PART#	DESCRIPTION	QTY.	UNIT
<b>SHELF ASSEMBLY FOLDING @ DOOR POCKET CURBSIDE</b>				
1	165106425	LIP SHELF AL 450589 X27.75	1	EA
2	165106414	SPACER AL .125X1.5X4.8	2	EA
3	155106413	STANCHION SHELF AL 459919X4.5	2	EA
4	155106402	ARM SHELF AL .125X10.19X14.01	2	EA
5	155106412	ANGLE SHELF FOLDING 450523X14.75	2	EA
6	125105408	SHIM AL.125X4X4.75	1	EA
7	165106424	PANEL SHELF AL .07X14.75X27.75 RH	1	EA
8	165106418	HINGE SHELF SS STL 47007796X27.5	1	EA
9	155106408	HORIZONTAL HAT AL .125X13.16X27.75	1	EA
<b>SHELF ASSEMBLY FOLDING ROADSIDE</b>				
11	175106401	LIP SHELF AL 450589X180.75	1	EA
12	155105421	ARM SHELF AL .125X10.19 X17.01	7	EA
13	165106417	HINGE SHELF 47007796X17.38	1	EA
14	175106402	HORIZONTAL HAT AL .125X13.16X156.75	1	EA
15	155106417	ANGLE SHELF AL 450523X17.75	2	EA
16	175106400	PANEL SHELF AL .07X17.75X132.75 LH	1	EA
17	175106407	HINGE SHELF SS STL 47007796X111	1	EA
2	165106414	SPACER AL .125X1.5X4.8	7	EA
3	155106413	STANCHION SHELF AL 459919X4.5	7	EA
41	175106408	HINGE SHELF SS STL 47007796X25.87	1	EA
<b>SHELF ASSEMBLY FOLDING CURBSIDE</b>				
18	175106404	LIP SHELF AL 450589X180.75	1	EA
19	175106406	HINGE SHELF AL 470077X65.38	1	EA
12	155105421	ARM SHELF AL .125X10.19 X17.01	8	EA
20	165106416	HINGE SHELF SS STL 47007796X114	1	EA
21	175106405	HORIZONTAL HAT AL .125X13.16X180.75	1	EA
22	155106417	ANGLE SHELF AL 450523X17.75	2	EA
6	125105408	SHIM AL.125X4X4.75	3	EA
23	175106403	PANEL SHELF AL .07X17.75X180.75RH	1	EA
2	165106414	SPACER AL .125X1.5X4.8	8	EA
3	155106413	STANCHION SHELF AL 459919X4.5	8	EA
<b>BUMPER KIT FOR FOLDING SHELVES x7</b>				
24	150106410	BRACKET SHELF BUMPER AL .125X2.5X2.73	1	EA
25	1107102	PLUG BUMPER RUBBER	1	EA
26	1106157	PLUG BRACKET SHELF ARM	19	EA
<b>GAS SPRING ASSEMBLY</b>				
27	47006119	SPRING GAS 50LB 12/8.5	1	EA
28	47006086	STUD BALL .31-18	2	EA
29	155106428	SUPPORT GAS SPRING SHIM AL .125X4.75X6.48	1	EA
30	155106429	SUPPORT GAS SPRING AL 450188X3	1	EA
31	155048411	STIFFENER 81H T-STUD AL 459919X75.25	14	EA
32	155048412	STIFFENER 81H T-STUD AL 459919X65.75	4	EA
33	155048418	STIFFENER 81H T-STUD AL 459919X66.75 @ DR PKT	2	EA
34	47009297	NET CARGO 1" WIDE D-RINGS	1	EA
35	47006020	TIE DOWN RING	5	EA
36	150127457	SUPPORT CARGO NET AL .125X5.23X51.21	1	EA
37	150127458	SPACER AL .188X1X1.81	1	EA
38	47009294	CONNECTOR	5	EA
39	47009298	"U" BOLT	3	EA
40	47012413	WIRE BASKET ( SUPPORT BRACKET - 47009547 AL .125X2X28.5)	1	EA



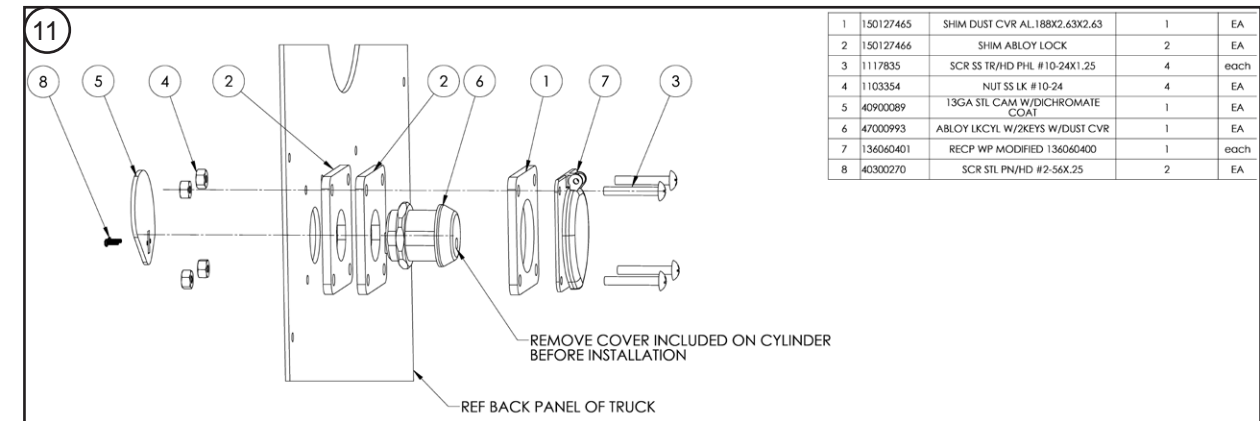
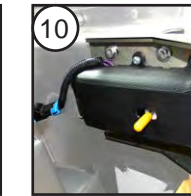
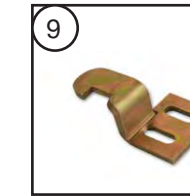
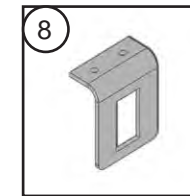
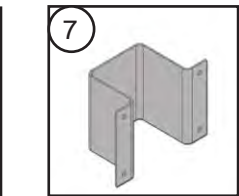
ITEM#	PART#	DESCRIPTION	QTY.	UNIT
<b>SHELF ASSEMBLY FIXED UPPER CURBSIDE</b>				
1	175105411	LIP SHELF AL 45058X214.38	1	EA
2	155105417	ANGLE SHELF FIXED REAR AL 450523X19.5	1	EA
3	175105410	PANEL SHELF AL .102X21.27X214.38 RH	1	EA
4	003779410	ARM SHELF AL .125X10.45X20.02	9	EA
5	165106415	ANGLE SHELF @ DR/PKT AL 450523X17	1	EA
6	155105421	ARM SHELF AL.125X10.19X17.01	2	EA
<b>SHELF ASSEMBLY FIXED UPPER ROADSIDE</b>				
8	175105409	LIP SHLF AL 450589X190.38	1	EA
9	155105417	ANGLE SHELF FIXED REAR AL 450523X19.5	1	EA
10	175105408	PANEL SHELF AL .102X21.27X190.38 LH	1	EA
4	003779410	ARM SHELF AL .125X10.45X20.02	8	EA
11	155105418	ANGLE SHELF FIXED BULKHEAD AL 450180X20	1	EA
12	1106157	PLUG BRACKET SHELF ARM	21	EA
<b>SHELF ASSEMBLY FIXED LOWER ROADSIDE</b>				
13	165105427	LIP SHELF AL 450589X31.75	1	EA
9	155105417	ANGLE SHELF FIXED REAR AL 450523X19.5	1	EA
14	165105426	PANEL SHELF AL .102X21.27X31.75 LH	1	EA
4	003779410	ARM SHLF AL .125X10.45X20.02	2	EA
11	155105418	ANGLE SHELF FIXED BULKHEAD AL 450180X20	1	EA
18	155048411	STIFFENER 81H T-STUD AL 459919X75.25	12	EA
19	155048412	STIFFENER 81H T-STUD AL 459919X65.75	4	EA



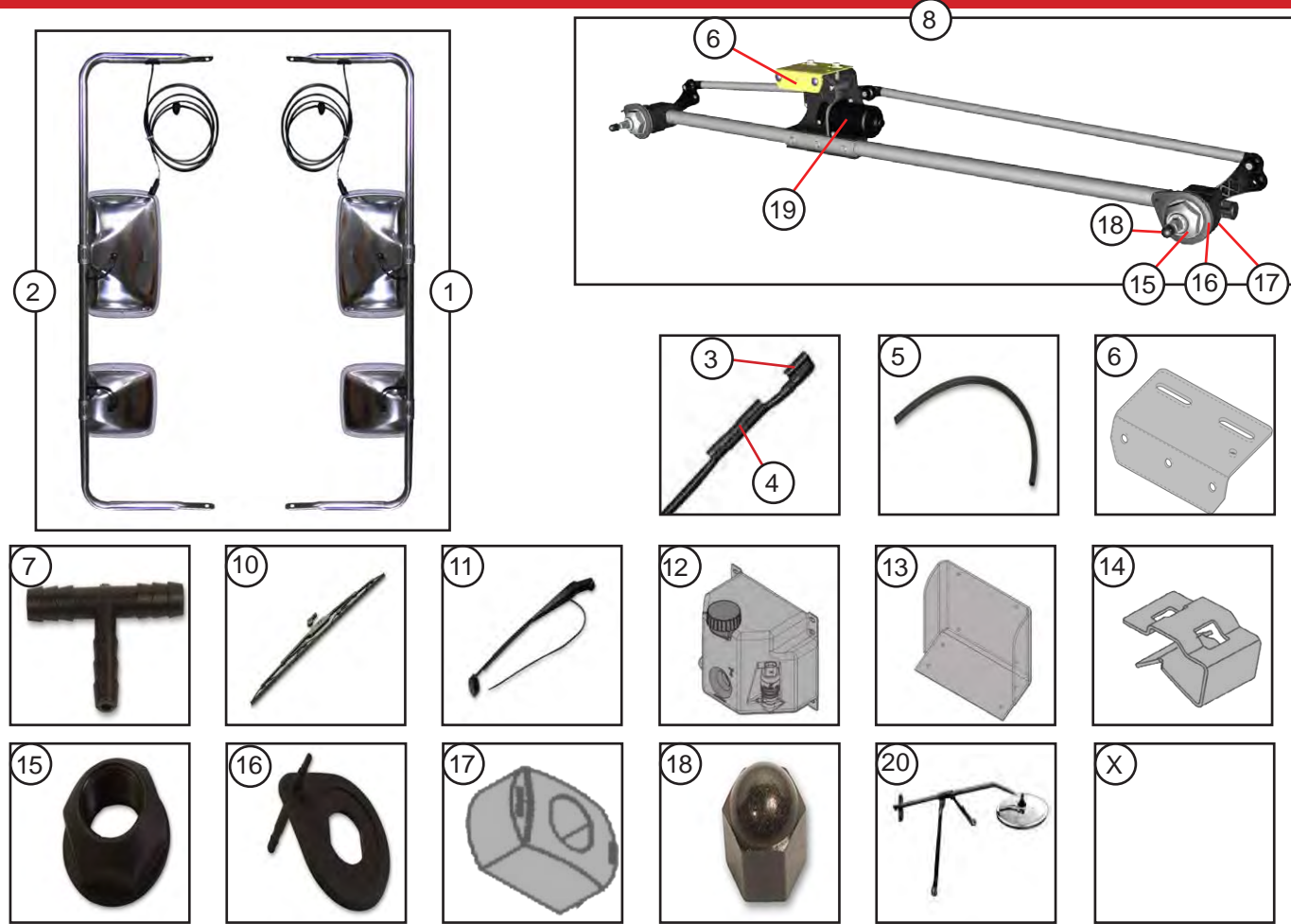
ITEM #	PART #	DESCRIPTION	QTY.	UNIT
<b>FRONT BUMPER</b>				
1	47004269	BUMPER STEEL FRONT 93W 9IN	1	EA
2	165008402	BRACE BUMPER FRONT STL .7X15.22X73	2	EA
<b>REAR BUMPER</b>				
3	103057204	BUMPER REAR 10" G-STRUT	1	EA
4	175007405	PLATE HANGER STEEL .312X10X10.69	2	EA
5	006370401	PROTECTIVE RUBBER BUMPER X18"	2	EA
6	145057400	SHIM BUMPER STEEL .188X2.5X11	2	EA



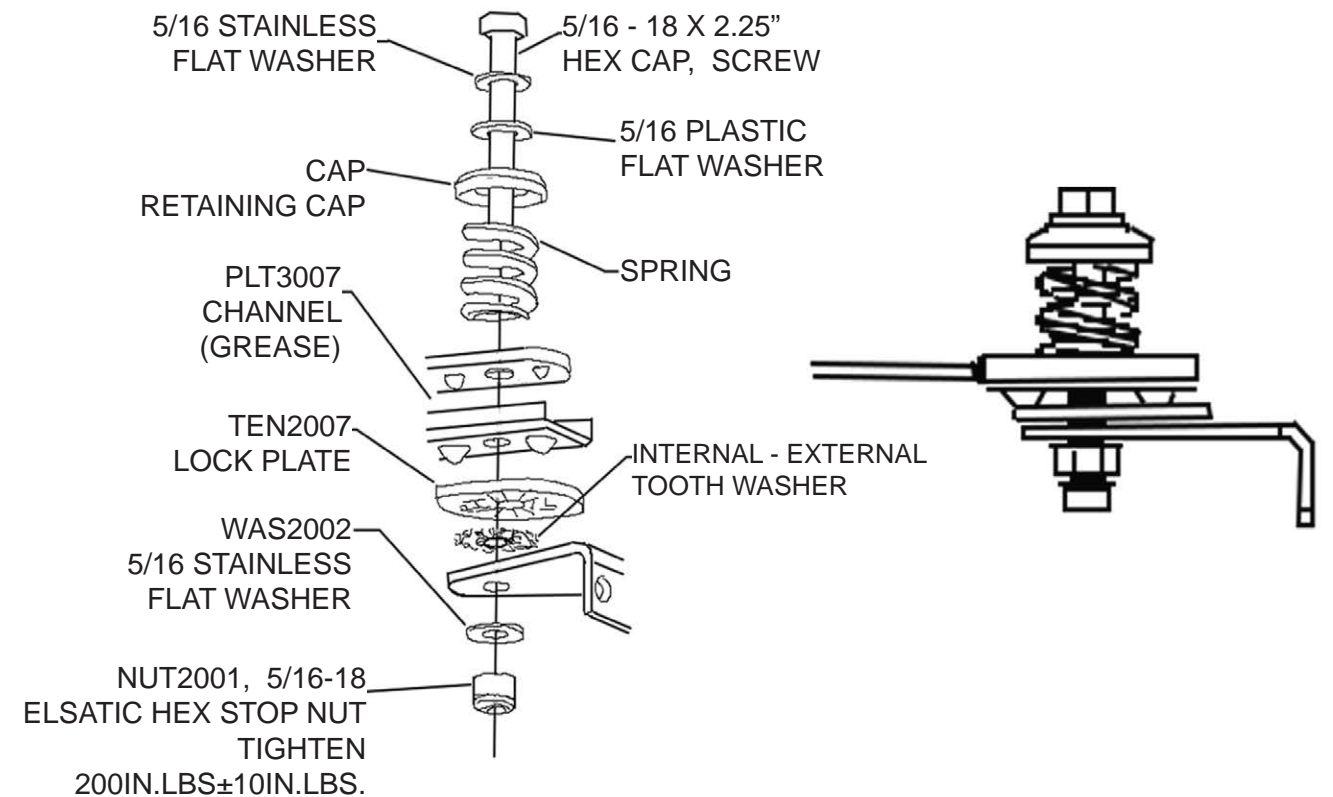
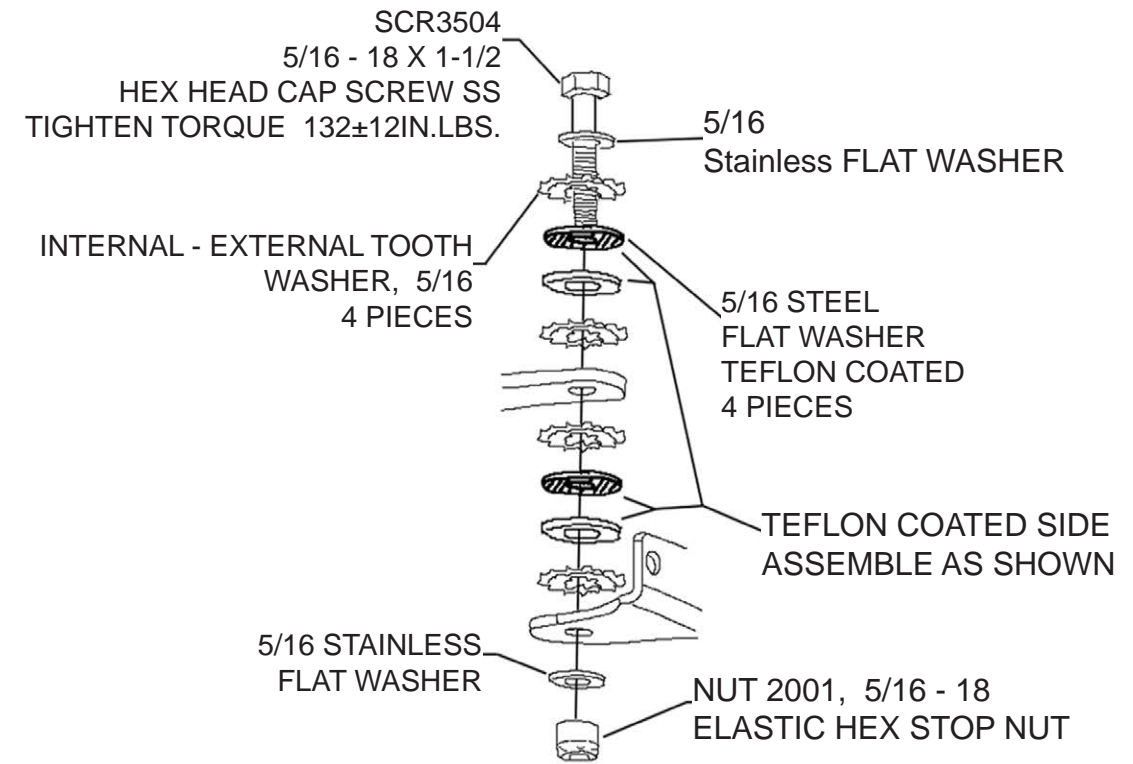
**CAUTION!**  
ALL DOORS AUTOMATICALLY LOCK WHEN CLOSED.  
ALWAYS CARRY YOUR ELECTRONIC KEY WITH YOU!

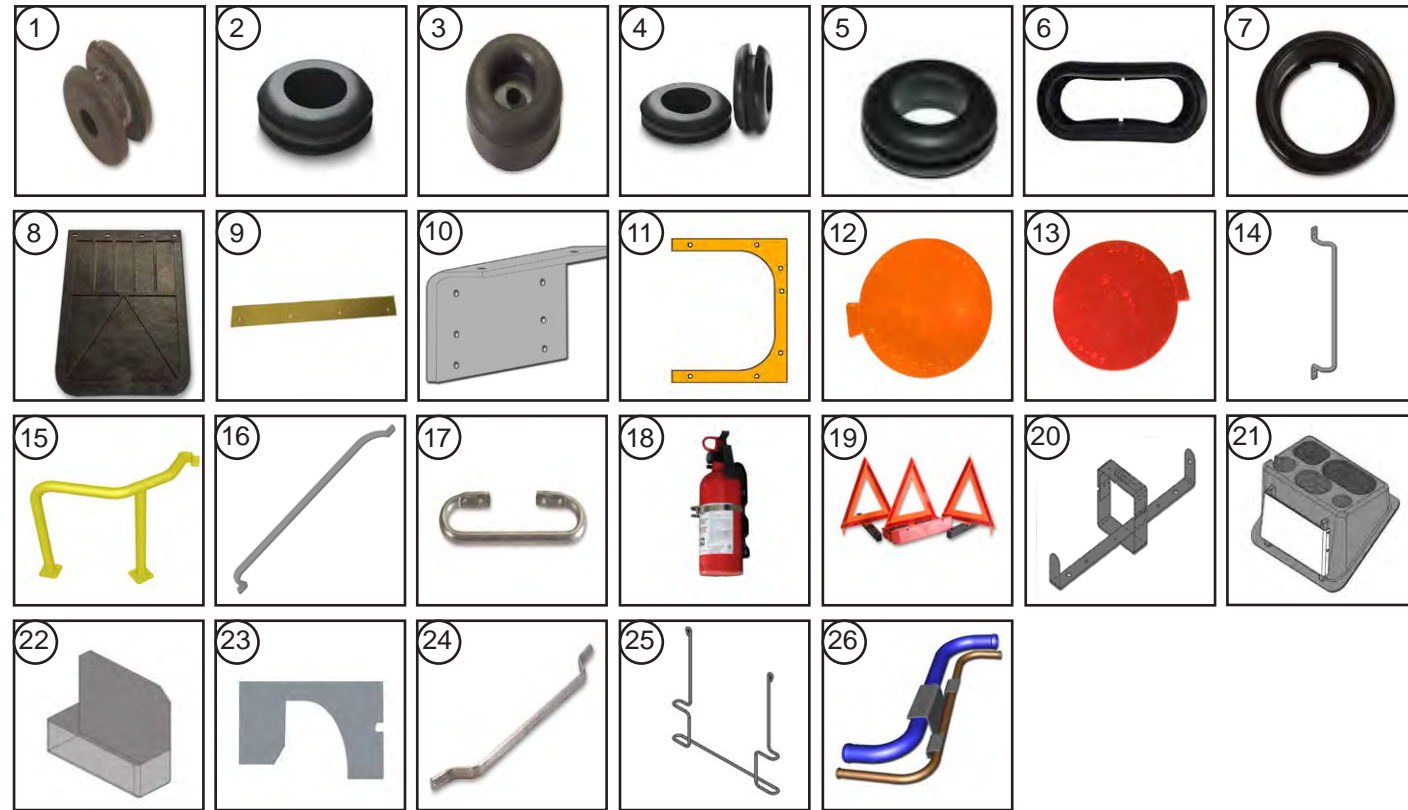


ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	46029044	KEYLESS RF MODULE w/ 3 FOBS	1	EA
2	46029045	REPLACEMENT KEY FOB	1	EA
3	46032317	SOLOINOID KEYLESS ENTRY CURBSIDE	1	EA
4	160074201	LATCH ASSEMBLY KEYLESS RUD	1	EA
5	006700405	LABEL - DOOR LOCK CAUTION (OPTIONAL)	1	EA
6	46023511	SWIITCH ROCKER DOOR UNLOCK SPST	1	EA
7	107093401	GUARD REAR SWITCH AL .102X3.25X9.12	1	EA
8	107093402	PLATE SWITCH REAR AL .125X2.06X3.13	1	EA
9	001761437	LATCH STRIKER STEEL .25 BULKHEAD DOOR	1	EA
10	46029042	LOCK ASSEMBLY KEYLESS CURBSIDE DOOR	1	EA
11	150127017	KEYLESS OVERRIDE RUD W/COVER	1	EA
12	155094400	BRACKET KEYLESS COVER AL .102X9X18.48	1	EA

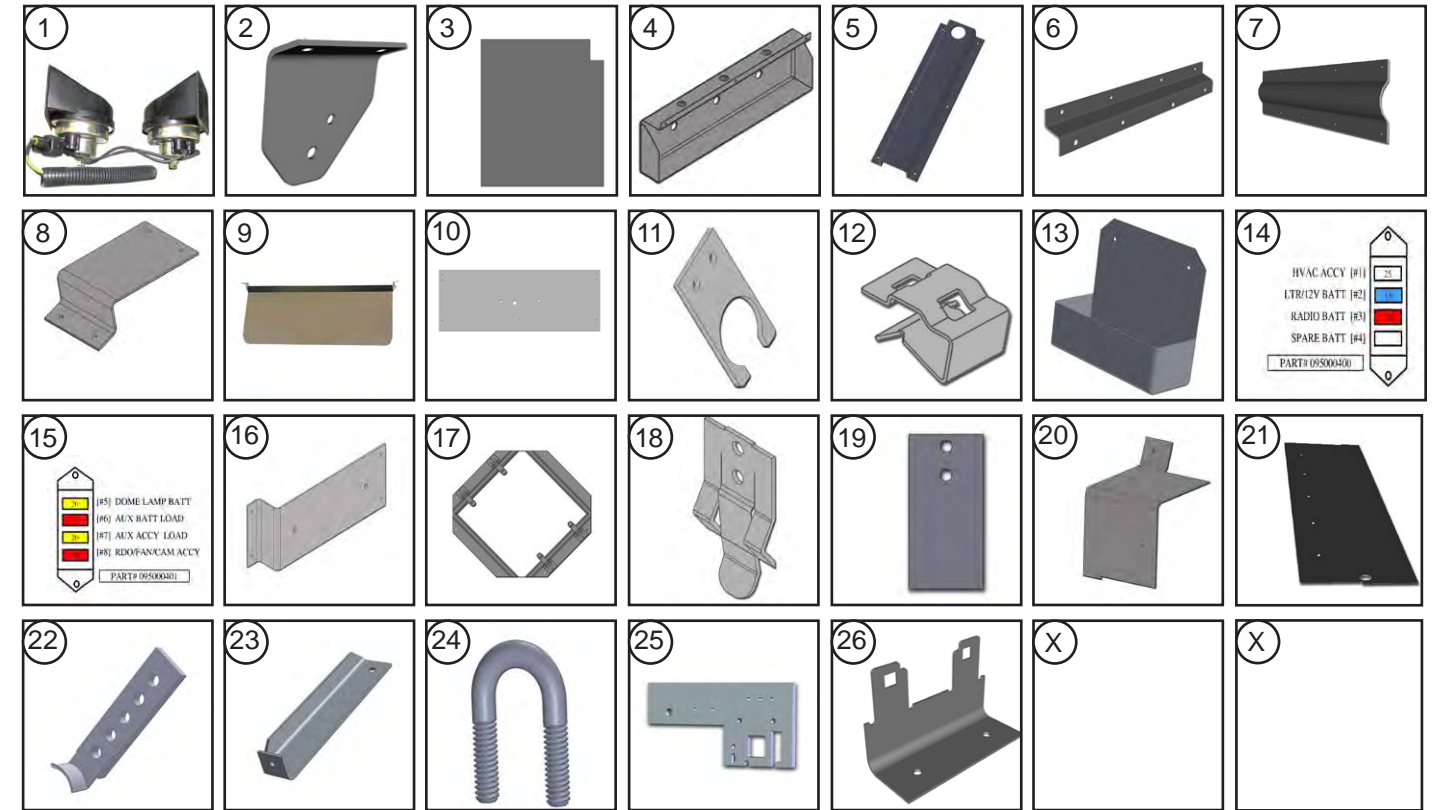


ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	47006169	MIRROR ASSEMBLY ROADSIDE HEATED	1	EA
2	47006170	MIRROR ASSEMBLY CURBSIDE HEATED	1	EA
3	47004271	WET KIT FOR WIPER ARM (SPRAY NOZZLE & HOSE)	1	EA
4	47004272	RETAINER CLIP FOR HOSE 2"	1	EA
5	1107122	HOSE .188 ID WSW	12	FT
6	083055454	BRACKET WIPER MOTOR	1	EA
7	1101694	TEE WSWA U/T	1	EA
8	47004188	WIPER SYSTEM TBLR 2 PIVOT	1	EA
10	47004134	BLADE 24IN BLACK	1	EA
11	47004206	ARM WSW WET 22IN RADIAL BLACK	1	EA
12	47004505	RESERVOIR W/PUMP WINDSHIELD WASHER	1	EA
13	165063400	BRACKET MOUNTING RSVR AL .25X14.9X17.58	1	EA
14	46021115	CLIP BODY LARGE PAN	1	EA
15	47005901	NUT	2	EA
16	47005902	PIVOT COVER	2	EA
17	47005903	SPACER	2	EA
18	81600189	ACORN NUT	2	EA
19	47005900	MOTOR WINDSHIELD WIPER	1	EA
20	47005099	MIRROR ASSEMBLY FRONT SIDE VIEW (10" MIRROR ONLY 47005611)	1	EA





ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	1107324	GROMMET .625X.25X0.875	1	EA
2	1107109	GROMMET .375X.125X.625	1	EA
3	1107079	GROMMET 1X.125X1.375	1	EA
4	44000052	GROMMET .688X.125X1	2	EA
5	46004416	GROMMET 1X.25X1.375	1	EA
6	46027656	GROMMET OBLONG BLACK	2	EA
7	46004402	GROMMET ROUND BLACK 4IN LAMP	4	EA
8	1107308	MUD FLAP BLACK NO LOGO 20X24	1	PR
9	7504428	RETAINER MD/FLP AL .125X1.5X20	2	EA
10	80795014	ANGLE RETAINER AL .188X5X20	2	EA
11	998512001	FUEL FILL REINFORCEMENT BRACKET	1	EA
12	46025018	REFLECTOR 2.88" AMBER	2	EA
13	46025017	REFLECTOR 2.88" RED	4	EA
14	47001084	GRAB HANDLE OFFSET	1	EA
15	47001047	GRAB RAIL POWDER COATED YELLOW	1	EA
16	47001082	GRAB HANDLE .5" X 17"	1	EA
17	90187300	GRAB HANDLE .5X15.7	1	EA
18	47009656	FIRE EXTINGUISHER 2.5 LB.	1	EA
19	47009547	TRIANGLE KIT SAFETY	1	EA
20	47009548	BRACKET MOUNTING TRIANGLE KIT	1	EA
21	47009653	CENTER CONSOLE (SHOWN WITH FRONT PANEL - 165127403)	1	EA
22	150107400	HOLDER FIRST AID KIT	1	EA
23	006526401	PANEL SPLASH VINYL .125X19.25X51.6	2	EA
24	98150310	GRAB HANDLE AL 450243X26.38	2	EA
25	47009706	SUPPORT BRACKET MUD FLAPS	2	EA
26	115012400	FUEL FILL EXTENSION	1	EA



ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	115085004	HORN	1	EA
2	115085401	BRACKET MOUNTING HORN AL .125X3.25X4.12	1	EA
3	175026400	SPLASH PAN FILLER 45200014X9X9	1	EA
4	165081400	GUARD LAMP REAR AL .07X11.2X21.25	2	EA
5	155127400	GUARD MARKER LAMP AL 450039X16.44	2	EA
6	097105453	GUARD WIRING BULKHEAD KYLS AL .07X1.85X20	1	EA
7	7600858	STIFFENER AL 450003X33.5DLH SLIDING WINDOW	1	EA
8	165019400	HEEL REST ALD .08X9.25X11 LH	1	EA
9	47005504	SUN VISOR 8X33	2	EA
10	100092400	BRACKET DOME LAMP	3	EA
11	090087401	PLATE FILLER WIRING AL.102X 1.44X2.63	2	EA
12	46021114	CLIP MEDIUM (LARGE - 46021115)	1	EA
13	150107400	HOLDER FIRST AID KIT AL .07X14.09X14.44	1	EA
14	095000400	LABEL FUSE BLOCK LH	1	EA
15	095000401	LABEL FUSE BLOCK RH	1	EA
16	165094400	BRACKET MOUNTING JUNCTION BOX REAR WIRING	1	EA
17	43001401	PLACARD HOLDER FRAME	1	EA
18	47009300	SPRING CLIP PLACARD	1	EA
19	165119400	BACKER PLATE PLACARD CLIP	1	EA
20	135024409	PLATE FILR AL .07X5.83X12.57 DLH SLIDING WINDOW	1	EA
21	083005452	PLATE FILR AL .07X4.08X27.58 DLH SLIDING WINDOW	1	EA
22	40300929	STRAP HANGER	1	EA
23	165040400	BRACKET HANGER AL .125X2.54X12.04	1	EA
24	40300930	"U" BOLT 3.5"	1	EA
25	095116400	INSULATION DASH WALL	1	EA
26	147028400	BRACKET FUSE AL .102X3.62X3.83	1	EA



ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	4600213	HEADLAMP ASSEMBLY	2	EA
2	4600615	LAMP PARK / TURN (GROMMET - 46004403 x2)	2	EA
3	46002272	LAMP COMBO S/T/T WITH BACKUP (SHOWN W/ GROMMET)	2	EA
3	46002222	LAMP COMBO S/T/T W/O BACKUP LAMP	2	EA
4	46001339	LAMP CLEARANCE MARKER LED AMBER	4	EA
4	46001362	LAMP CLEARANCE MARKER LED AMBER	1	EA
5	46001382	LAMP CLEARANCE MARKER LED AMBER P2 D/FUNC	4	EA
6	46001340	LAMP CLEARANCE MARKER LED RED P2	2	EA
7	46001380	LAMP CLEARANCE MARKER LED RED P2 D/FUNC	3	EA
8	46001384	LAMP CLEARANCE MARKER LED RED PC	2	EA
9	47009642	LAMP LICENSE PLATE CLEAR LED	1	EA
10	46002637	LAMP DOME LED CAB (MOUNTING BRACKET - 100092400)	1	EA
11	47006065	RING TUBE STEEL 4IN ROUND FLG MTD	1	EA
12	46002638	LAMP DOME LED CARGO (BRACKET - 100092401)	2	EA
13	46023508	SWITCH ROCKER DOME CAB SPST ON-OFF	1	EA
14	46023603	SWITCH ROCKER DOME CARGO SPDT ON-ON	1	EA
15	46023511	SWITCH ROCKER DOOR UNLOCK SPST	1	EA
16	46029061	SWITCH ROCKER DASH FAN SPDT ON-OFF-ON	1	EA
17	46023611	SWITCH ROCKER BASE ONLY SPDT ON-ON	1	EA
18	46023618	SWITCH ACTUATOR ONLY HEATED MIRRORS	1	EA
19	46023603	SWITCH ROCKER DOME CARGO SPDT ON-ON	1	EA
20	46002427	LAMP CLEAR STEPWELL	2	EA
21	46003017	LAMP INTERMITANT WIPER	1	EA
NS	168084203	IDLE TIMER CONTROL 3 MIN	1	EA



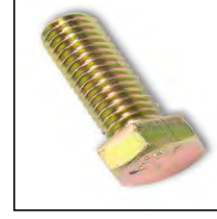
ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	48200164	MONITOR BACK UP CAMERA (MOUNT - 48200193)	1	EA
2	46029042	LOCK KEYLESS ENTRY CURBSIDE	1	EA
3	46025612	RADIO DOUBLE DIN AM/FM/NAV/BT	1	EA
4	46025590	SPEAKERS 6.5" BLACK	2	EA
5	46025559	ANTENNA TOP/SIDE MOUNT	1	EA
6	46030011	FAN 2 SPEED 270 CFM	1	EA
7	46027623	BOOT E/BLK HEATER WEATHER PACK CHROME RECEPTICLE	1	EA
8	46027624	PLUG 5-15 E/BLK HEATER WEATHER PACK CHROME		EA
9	46027625	RECEPTICLE 5-15 FLEX CABLE BLACK	1	EA
10	46027377	RECEPTICLE CHROME FOR BLANKET HEATER CORD	1	EA
11	46025305	SWITCH MAGNETIC REED NORMALLY OPEN	1	EA
11	46025302	SWITCH MAGNETIC REED NORMALLY OPEN RUD AJAR	1	EA
12	46032312	TIMER 30 MIN 10A W/O RELAY	1	EA
13	46032336	TIMER 20 SECOND 10A MAX	1	EA
14	150127459	SUPPORT WIRE RACK AL .125X2X28.5	2	EA
15	46032341	TIMER 10 MINUTE 10A W/O RELAY	1	EA
16	48200167	CABLE - CAMERA TO MONITOR		EA
17	48200191	CAMERA BACK UP (CAMERA SUN VISOR - 48200192)	1	EA
18	165127400	COVER WIRE @ TRANSOM AL .102X7.04X58.94	1	EA
19	46032346	BATTERY LOW VOLTAGE DISCONNECT 20AMP	1	EA
20	097105454	GUARD WIRING @ BULKHEAD KEYLESS AL .07X1.85X14	1	EA
21	167073402	BRACKET RUD MAGNETIC SWITCH	1	EA
22	46026422	IDLE TIMER CONTROLLER F-59	1	EA
23	46026414	FLASHER MODULE TURN SIGNAL LED LAMPS	1	EA
24	115085005	SENSOR AMBIENT AIR TEMP F-59	1	EA

# WIRING HARNESS

PAGE #	PART #	DESCRIPTION	QTY.	UNIT
50	007388315	HARNESS JUMPER Y 1WR P&P X180	3	EA
51	007388322	HARNESS JUMPER Y 2WR P&P X120	1	EA
52	007388323	HARNESS JUMPER Y 2WR P&P X36	1	EA
53-54	007391210	HARNESS ROOF TO NOSE	1	EA
55	46024562	HARNESS RADIO POWER/SPEAKER	1	EA
56	46025591	HARNESS SPEAKER	1	EA
57	47004506	HARNESS PIGTAIL PUMP WASHER	1	EA
58	082091200	HARNESS POWER OPTION FROM BATTERY	1	EA
59	88117437	HARNESS JUMPER TEE GENERIC	3	EA
60	88117487	HARNESS SWITCH MAGNETIC REED	1	EA
61	090051201	HARNESS MIRROR HEATED W/ROCKER SWITCH	1	EA
62	090086200	HARNESS REAR WIRING LH BACK PANEL	1	EA
63	092086205	HARNESS REAR WIRING RH BACK PANEL	1	EA
64	093093205	HARNESS TRANSOM CHMSL READY	1	EA
65-67	115084202	HARNESS COMMAND CENTER F59	1	EA
68	115084203	HARNESS FUSE CENTER F59 2011	1	EA
69	115085202	HARNESS HOOD W/ HORN	1	EA
70	115088201	HARNESS JUMPER I/P F59	1	EA
71	115088202	HARNESS JUMPER I/P WPR F59 2011	1	EA
72	117067201	HARNESS SEAT SENSOR WRG	1	EA
73-74	122111201	HARNESS EXTENSION CORD 25' 120V	1	EA
75	137392203	HARNESS JUMPER STEP WELL LMP W/RLY LED	1	EA
76	140088200	HARNESS JUMPER Y 2WR P&P X48	1	EA
77	155084203	HARNESS SWITCH RAD OFF REVERSE TRIG W/RLY	1	EA
78	157388200	HARNESS JUMPER SPCL CHSML ICC	1	EA
79	167081200	HARNESS JUMPER 3WR	3	EA
80-81	167086202	HARNESS REAR WIRING	1	EA
82-83	175084200	HARNESS FUSE/BLK LOW VOLT DISCONN	1	EA
84	177093202	HARNESS ROOF J/BX 17/20FT6IN	1	EA
85	177095201	HARNESS JUMPER SB SENSE GND	1	EA



## HEX CAP SCREWS



Size	Description	Thread	Lengths															
			.62	3/4"	1"	1-1/4"	1-1/2"	1-3/4"	2"	2-1/2"	3"	3-1/4"	4"					
1/4" Hex Cap Screw	GR5 ZC/RO	20																
1/4" Hex Cap Screw	GR5 ZC/RoHS	20			1101688			1117009										
1/4" Hex Cap Screw	18-8 Stainless	20		1117816		1117819								1117818				
1/4" Hex Cap Screw	ASTM F593C	20																
5/16" Hex Cap Screw	18-8 Stainless	18																
5/16" Hex Cap Screw	GR8 ZC/Y	18			1117045													40300737
5/16" Hex Cap Screw	ASTM F593	18			1117803					1117059								
5/16" Hex Cap Screw	GR5 ZC/R	16							1117837									
3/8" Hex Cap Screw	GR8 ZC/Y	18						1117049	1117055									
3/8" Hex Cap Screw	GR8 ZC/Y	16			1117843													
3/8" Hex Cap Screw	GR5 ZC/RO	16			47012646					1117097						1117000		
3/8" Hex Cap Screw	GR5 ZC/RoHS	16	40300056	40300054						40300058					1117040			
3/8" Hex Cap Screw	ASTM F593C	16								1117052								
7/16" Hex Cap Screw	GR8 ZC/Y	20																
1/2" Hex Cap Screw	GR5 ZC/RoHS	13																1117035
1/2" Hex Cap Screw	GR5 ZC/RO	13															1117050	
1/2" Hex Cap Screw	GR5 ZC/RoHS	13						1117121								1117051		
1/2" Hex Cap Screw	GR5 ZC	13													1117124			
1/2" Hex Cap Screw	GR5 ZC	13														051461		
5/8" Hex Cap Screw	GR5	11																40300259

ZC	Zinc Coated
GR	Grade
Y	Yellow
RO	
RoHS	AS9100C ISO 9001:2008
ASTM F593C	American Standards Measurements Specifications

 Grade 5 Medium Carbon Steel
 Grade 8 Medium Carbon Alloy Steel
 Grade 2 Low or Medium Carbon Steel



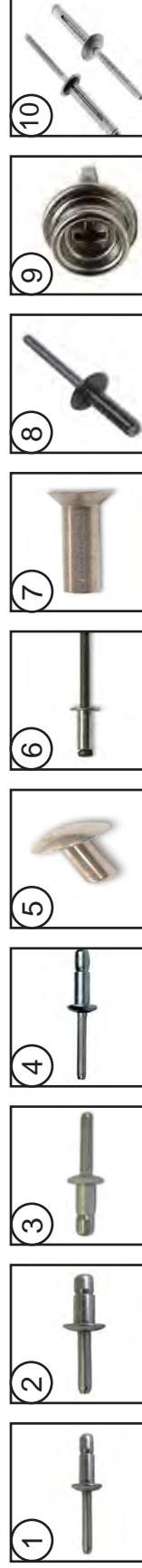
ZP - ZINC PLATED

Standard	Thread	FIG.	#8	#10	DIA.					
					1/4"	5/16	3/8"	.44	1/2"	
NYLON LOCKING NUT, HEX	32	1		052266						
NYLON LOCKING NUT, HEX	24	1		40301303						
NYLON LOCKING NUT, HEX ZP	24	3		1117307						
NYLON LOCKING NUT, HEX ZP	20	3			1117310					
NYLON LOCKING NUT, HEX ZP	18	3				1117838				
NYLON LOCKING NUT, HEX ZP	16	3					1117344			
LOCKING NUT HEX FLANGE .44-20 OVAL	20	4						1217003		
NUTSERT EXPANDING NYL .275 SQ	20	5		40900006						
NUT NON LOCKING	24	2		1117303						
NUT NON LOCKING	20	2			1117312					
NUT NON LOCKING	16	2					1117316			
<b>GRADE 5</b>										
NUT STL LK LRG FLG GD5 .31-18	18	4						40100560		
NUT STL HEX LK B ZP .5-13 GR 5	13	1							1117283	
<b>Stainless</b>										
NUT SS LOCKING	32	3	1117347	1117699						
NUT SS LOCKING	24	6		1103354						
NUT SS LOCKING	20	6			1117336					
NUT SS NON LOCKING	20	7			40100044					
NUT SS ACORN LOW CROWN	20	8			40100061					
<b>Specialty</b>										
CHANNEL NUT WITH SPRING 1 X 1-1/4"	20	9			47009988					

Genuine OEM Parts

1.800.233.4823

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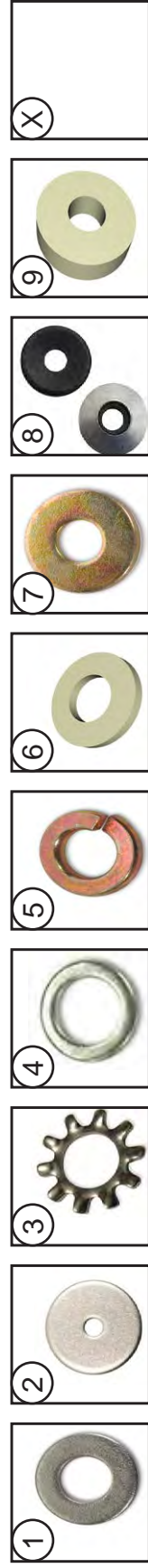
MAGNA LOCK	Diameter	Fig.	.25	.312	.375	.438	.44	.5	.562	.625	.687	.75	.875	1"
HUCK R6-4	.188	1		1117084	1117061									
HUCK R8-6	.25	2		1117087										
PROTRUDING HEAD	.25	3			40200304					40200303				
FLUSH HEAD B6-4	.25	4						40200630						
RIV AL BRAIZER HEAD	.125	5		1117402	1117404	1117405		1117406						
RIV AL BRAIZER HEAD	.188	5		1117351	1117353	1117355		1117357	1117359	1117361	1117363	1117365		
RIV AL BRAIZER HEAD	.25	5						1117380					1117390	1117395
RIV AL BRAIZER HEAD MOD	.25	5					40200214	1117409	1117410		1117408			
RIV AL FLAT HEAD	.188	7					1117436							
RIV AL FLAT HEAD POP	.25	7								40200630				
RIV AL DOME HEAD BLIND	.125	10	1117464											
RIV AL DOME HEAD BLIND	.188	10	1117456					1117458		1117459				
POP AL OPEN END BLIND	.125	6			1117421									
POP AL OPEN END BLIND	.188	6	1117456		1117457					1117459		1117458		
POP CLSD BLACK		8						40200629		40200631				
SNAP FASTNER		9						40900925						
BULB TYPE BLIND w/WASHER	.188	10			40200621			40200501						

Genuine OEM Parts

1.800.233.4823

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Standard	Center	FIG.	3/8	1/2	9/16	5/8	3/4"	7/8	1"	1-1/4"	1-3/4"
#10 TYPE B FLAT WASHER ZINC/ROHS	.19	1		1117929							
#10 X 1 FENDER WASHER ZC	.19	2							1117950		
#10 EXTERNAL TOOTH LW ZC	.19	3	1117971								
1/4 EXTERNAL TOOTH LW ZC	1/4	3		1117975							
1/4 TYPE B NARROW FLAT WASHER	1/4	4		1117941							
1/4 USS FLAT WASHER ZC/ROHS	1/4	1			1117953						
1/4 F436 (A325) FLAT WASHER ZC/ROHS	1/4	1			40000047				1117952		
.266 X 1 FLAT WASHER .060 THK ZC/RO	1/4	1									
1/4 USS FLAT WASHER	1/4	1		1117885							
5/16 SPLIT LOCK WASHER ZC/ROHS	5/16	5	1117965								
5/16 USS FLAT WASHER ZC/ROHS	5/16	1						1117955			
3/8 USS FLAT WASHER ZC/ROHS	3/8	1						1117957			
3/8 X 1 FLAT WASHER 1/4 THK NYLON	3/8	6							40000038		
1/2 TYPE B REGULAR FLAT WASHER	1/2	1								40000050	
1/2 TYPE B REGULAR FLAT WASHER ZC	1/2	1								1117945	
1/2 TYPE B WIDE FLAT WASHER ZC/ROHS	1/2	1									1117959
<b>Grade 8</b>											
5/16 USS FLAT WASHER GR 8 ZC/Y	5/16	7						1117937			
3/8 USS FLAT WASHER GR 8 ZC/Y	3/8	7							1117947		
3/8 SAE FLAT WASHER GR 8 ZC/Y	3/8	7					40000046				
7/16 USS FLAT WASHER GR 8 ZC/Y	7/16	7								1217002	
1/2 SAE FLAT WASHER GR 8 ZC/Y	1/2	7							1117943		
<b>Stainless 18-8</b>											
#10 X 5/8 BONDED SEALER 18-8 SS	.19	8				40000053					
1/4 X 5/8 BONDED SEALER 18-8 SS	1/4	8				40000051					
3/8 X 3/4 BONDED SEALER 18-8 SS	3/8	8					40000054				
3/8 X 1" BONDED SEALER 18-8 SS	3/8	8							40000055		
1/4 EXTERNAL TOOTH SS LW ZC	1/4	3		40000510							
<b>Speciality</b>											
WASHER NYLON .13 X .62 ID X 1.38OD	5/8	9									137147429

Genuine OEM Parts

1.800.233.4823

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	Diameter	Fig.	Length											
			.5	.625	.75	.875	1"	1-1/4"	1-1/2"	2-1/4"	3"			
<b>18-8 Stainless</b>														
PHILLIPS TRUSS M/S 18-8 SS	8 - 32	1		1117716										
PHILLIPS TRUSS M/S 18-8 SS	10 - 24	1	1117800	1117814	40300498			40300451	1117835					
PHILLIPS TRUSS M/S 18-8 SS	1/4 - 20	1			1117784				40300453	40300454				
PHILLIPS TRUSS M/S 18-8 SS	5/16 - 18	1			1117928									
PHILLIPS FLAT M/S 18-8 SS	10 - 32	2						1117830						
PHILLIPS FLAT M/S 18-8 SS	1/4 - 20	2						1117782						
PHILLIPS ROUND M/S 18-8 SS	10 - 24	6			40300809									
6 LOBE PAN T/C M/S 18-8 SS	1/4 - 20	9			1117209									
								1117815						
<b>Standard Steel RoHS</b>														
PHILLIPS ROUND M/S ZC/ROHS	8 - 32	6								1117839				
PHILLIPS PAN TEKS/3 ZC/ROHS	10 - 16	5			1117674									
PHILLIPS TRUSS M/S ZC/ROHS	10 - 24	1												1117793
PHILLIPS TRUSS M/S ZC/ROHS	10 - 32	1	1117723		1117688				1117715					
<b>T/C - Thread Cutting</b>														
PHIL PAN T/S TYPE A ZC	10	8												
PHIL TRUSS T/S TYPE A BLK	10	4							1117680					
PHIL PAN T/S TYPE A BLK	10	7							40300101					
PHIL PAN T/S TYPE A ZC	12	8			1117666				40300503					
6 LOBE PAN T/C	1/4 - 20	9												
									40300922					
										1117684				40300042



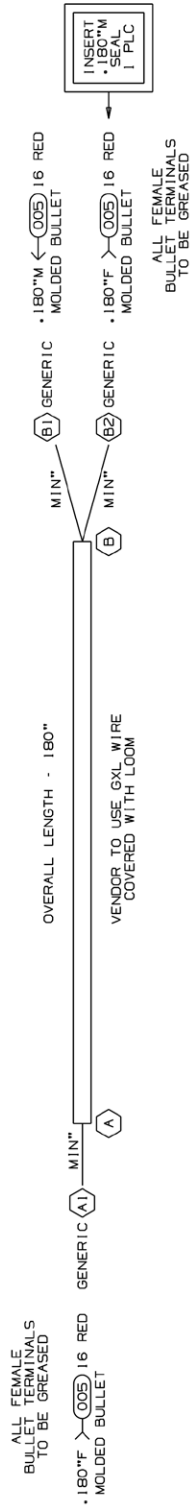
T/C Thread Cutting 6 Lobe Type A

Genuine OEM Parts

1.800.233.4823

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CIRCUIT	DESCRIPTION	END POINTS	FUNCTION
005	16 RED	A1, B1, B2	CHMSL



DRAWING NO.	REV	SHT
007388315		1 of 1
DESCRIPTION	BY	DATE
RELEASE TO PRODUCTION		

- VENDOR MAY REPLACE PIGTAILS WITH WIRING TO APPROVED MOLDINGS OR CONNECTORS. PIGTAILS SHOWN IN TERMINAL VIEW.
- HARNESS TO BE TESTED FOR CONTENT, OPENS, SHORTS, AND CONTINUITY.
- CONNECTORS SHOWN FROM WIRE ENTRY SIDE, UNLESS OTHERWISE NOTED.
- SPLICES TO BE AUTOMATED WITH HEAT SHRINK TUBING. HEAT SHRINK BUTT SPLICES ARE ACCEPTABLE FOR M.O. FABRICATION IF NECESSARY.
- TAPE [1111098]: 6" AT BREAKOUTS AND 2" AT LOOM ENDS.
- HARNESS TO HAVE A LABEL SHOWING MORGAN OLSON PART NUMBER, REVISION LEVEL, AND DATE OF MANUFACTURE.
- SPLIT POLY LOOM UNLESS OTHERWISE NOTED.
- GXL WIRE.

NOTES:

1. GXL WIRE.

2. SPLIT POLY LOOM UNLESS OTHERWISE NOTED.

3. HARNESS TO HAVE A LABEL SHOWING MORGAN OLSON PART NUMBER, REVISION LEVEL, AND DATE OF MANUFACTURE.

4. TAPE [1111098]: 6" AT BREAKOUTS AND 2" AT LOOM ENDS.

5. SPLICES TO BE AUTOMATED WITH HEAT SHRINK TUBING. HEAT SHRINK BUTT SPLICES ARE ACCEPTABLE FOR M.O. FABRICATION IF NECESSARY.

6. CONNECTORS SHOWN FROM WIRE ENTRY SIDE, UNLESS OTHERWISE NOTED.

7. HARNESS TO BE TESTED FOR CONTENT, OPENS, SHORTS, AND CONTINUITY.

8. VENDOR MAY REPLACE PIGTAILS WITH WIRING TO APPROVED MOLDINGS OR CONNECTORS. PIGTAILS SHOWN IN TERMINAL VIEW.

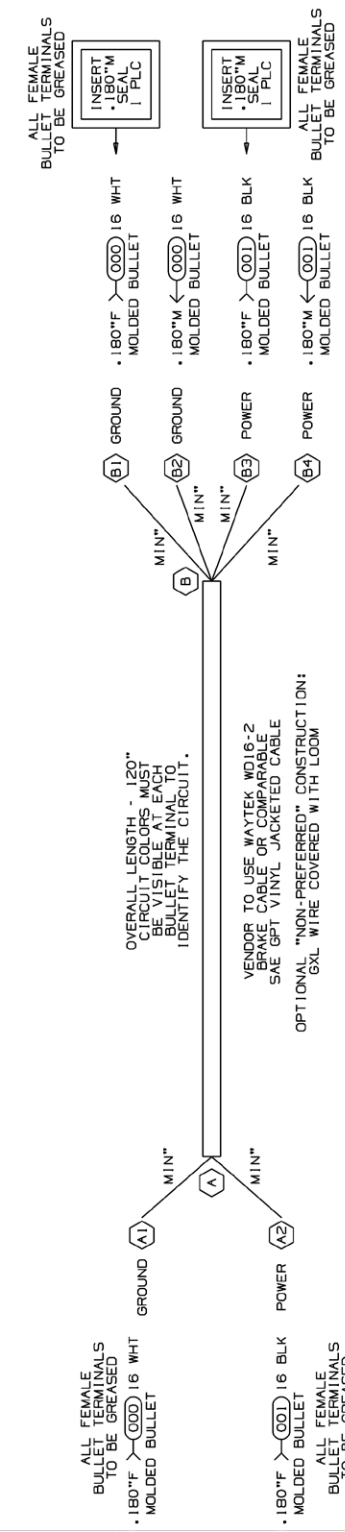
DRAWING NO.	REV	SHT
007388315		1 of 1
DESCRIPTION	BY	DATE
RELEASE TO PRODUCTION		

HARNESS AND LOOM TOLERANCES
UP TO 60" : -0/+2"
60" TO 100" : -0/+4"
100" TO 200" : -0/+5"
200" TO 400" : -0/+6"
400" TO 600" : -0/+7"
OVER 600" : -0/+8"
BO TO BO : -0/+2"
TOLERANCE IS NOT APPLICABLE TO OVERALL HARNESS LENGTH, BREAKOUT TO END, OR LOOM.

FIRST USE: STRIP AND TAMP W/ WIRE MARKER TO IDENTIFY DOOR SWITCH

CIRCUIT	DESCRIPTION	END POINTS	FUNCTION
000	16 WHT	A1, B1, B2	GROUND
001	16 BLK	A2, B3, B4	POWER

DRAWING NO.	REV	SHT
007388322		1 of 1
DESCRIPTION	BY	DATE
RELEASE TO PRODUCTION		



OVERALL LENGTH - 120" CIRCUIT COLORS MUST BE USED TO IDENTIFY TERMINALS TO IDENTIFY THE CIRCUIT.

VENDOR TO USE WATTEK WD16-2 BRAKE CABLE OR COMPARABLE SAE GPT VINYL JACKETED CABLE OPTIONAL "NON-PREFERRED" CONSTRUCTION: GXL WIRE COVERED WITH LOOM

HARNESS AND LOOM TOLERANCES
UP TO 60" : -0/+2"
60" TO 100" : -0/+4"
100" TO 200" : -0/+5"
200" TO 400" : -0/+6"
400" TO 600" : -0/+7"
OVER 600" : -0/+8"
BO TO BO : -0/+2"
TOLERANCE IS NOT APPLICABLE TO OVERALL HARNESS LENGTH, BREAKOUT TO END, OR LOOM.

FIRST USE: STRIP AND TAMP W/ WIRE MARKER TO IDENTIFY MIDBODY MARKER

NOTES:

1. GXL WIRE.

2. SPLIT POLY LOOM UNLESS OTHERWISE NOTED.

3. HARNESS TO HAVE A LABEL SHOWING MORGAN OLSON PART NUMBER, REVISION LEVEL, AND DATE OF MANUFACTURE.

4. TAPE [1111098]: 6" AT BREAKOUTS AND 2" AT LOOM ENDS.

5. SPLICES TO BE AUTOMATED WITH HEAT SHRINK TUBING. HEAT SHRINK BUTT SPLICES ARE ACCEPTABLE FOR M.O. FABRICATION IF NECESSARY.

6. CONNECTORS SHOWN FROM WIRE ENTRY SIDE, UNLESS OTHERWISE NOTED.

7. HARNESS TO BE TESTED FOR CONTENT, OPENS, SHORTS, AND CONTINUITY.

8. VENDOR MAY REPLACE PIGTAILS WITH WIRING TO APPROVED MOLDINGS OR CONNECTORS. PIGTAILS SHOWN IN TERMINAL VIEW.

DRAWING NO.	REV	SHT
007388322		1 of 1
DESCRIPTION	BY	DATE
RELEASE TO PRODUCTION		

HARNESS AND LOOM TOLERANCES
UP TO 60" : -0/+2"
60" TO 100" : -0/+4"
100" TO 200" : -0/+5"
200" TO 400" : -0/+6"
400" TO 600" : -0/+7"
OVER 600" : -0/+8"
BO TO BO : -0/+2"
TOLERANCE IS NOT APPLICABLE TO OVERALL HARNESS LENGTH, BREAKOUT TO END, OR LOOM.

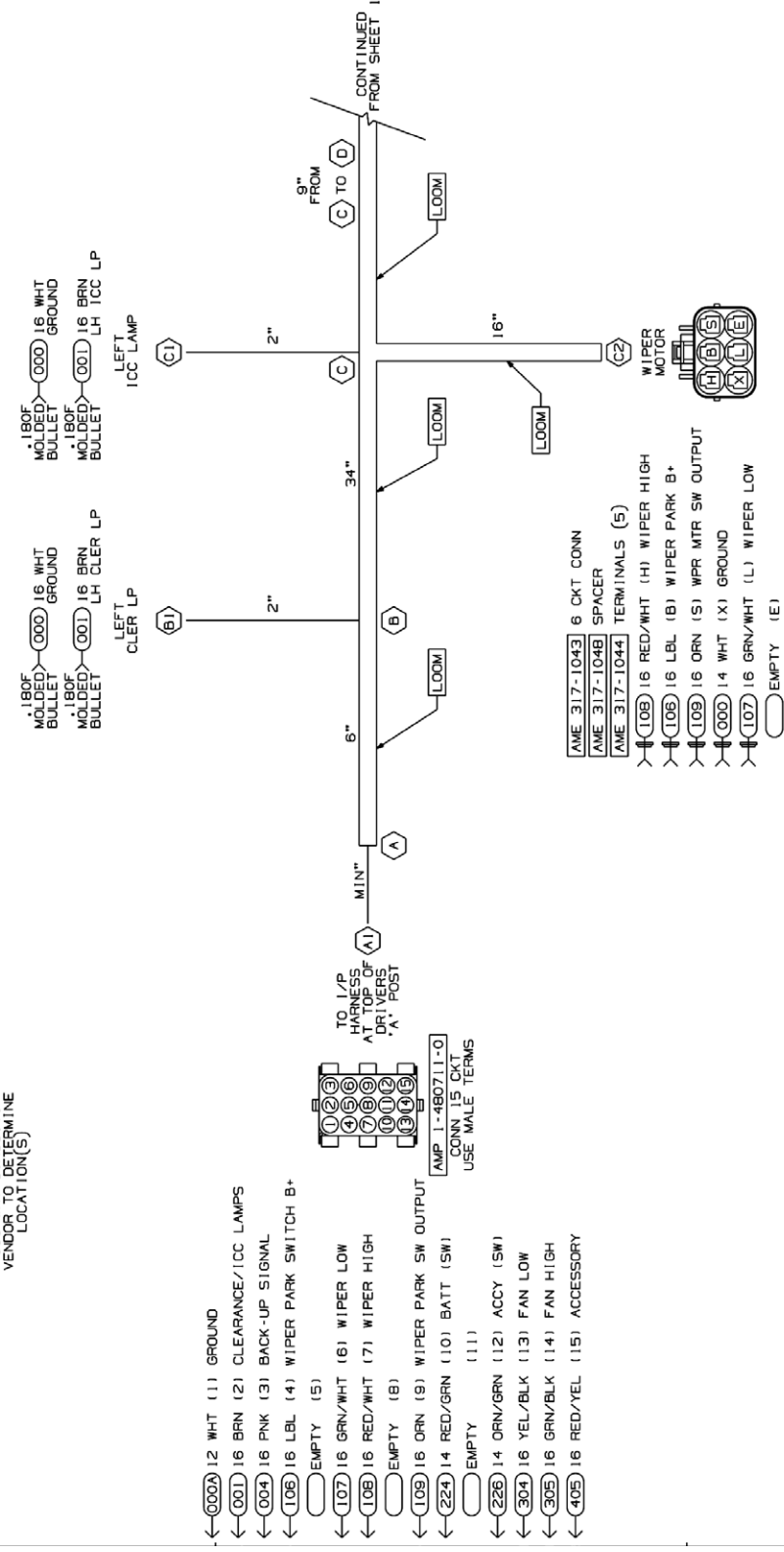


DRAWING NO.	REV	SHT
007391210	A	2 OF 2
REV	DESCRIPTION	DATE
A	RELEASE FOR PRODUCTION	
A	REDRAWN & REVISED	

CIRCUIT	GA/COLOR	END POINTS	FUNCTION
109	16 ORN	A1,C2	WIPER PK SWITCH OUTPUT
224	14 RED/GRN	A1,D2	BATTERY - SWITCHED
226	14 ORN/GRN	A1,D2	ACCESSORY - SWITCHED
304	16 YEL/BLK	A1,D3	DASH FAN LOW
305	16 GRN/BLK	A1,D3	DASH FAN HIGH
405	16 RED/YEL	A1,E2	AUXILIARY ACCESSORY

CIRCUIT	GA/COLOR	END POINTS	FUNCTION
000A	12 WHT	A1,D4, SPLICE 1	GROUND
000	14/16 WHT	B1,C1,C2,D1,E1,E2,E3, SPLICE 1	GROUND
001	16 BRN	A1,B1,C1,D1,E1,E3	CLEARANCE/ICC LPS
004	16 PNK	A1,E2	BACK-UP SIGNAL
106	16 LBL	A1,C2	WIPER PARK SWITCH B+
107	16 GRN/WHT	A1,C2	WIPER LOW
108	16 RED/WHT	A1,C2	WIPER HIGH

[SPLICE 1]  
000A, 12 WHT IS TO BE  
SPLICED TO THE  
000 WHT CIRCUIT  
VENDOR TO DETERMINE  
LOCATION(S)



- AME 317-1043 6 CKT CONN
- AME 317-1048 SPACER
- AME 317-1044 TERMINALS (5)
- (108) 16 RED/WHT (H) WIPER HIGH
- (106) 16 LBL (B) WIPER PARK B+
- (109) 16 ORN (S) WPR MTR SW OUTPUT
- (000) 14 WHT (X) GROUND
- (107) 16 GRN/WHT (L) WIPER LOW

AMP 1-480711-0  
CONN 15 CKT  
USE MALE TERMS

- (000A) 12 WHT (1) GROUND
- (001) 16 BRN (2) CLEARANCE/ICC LAMPS
- (004) 16 PNK (3) BACK-UP SIGNAL
- (106) 16 LBL (4) WIPER PARK SWITCH B+
- ( ) EMPTY (5)
- (107) 16 GRN/WHT (6) WIPER LOW
- (108) 16 RED/WHT (7) WIPER HIGH
- ( ) EMPTY (8)
- (109) 16 ORN (9) WIPER PARK SW OUTPUT
- (224) 14 RED/GRN (10) BATT (SW)
- ( ) EMPTY (11)
- (226) 14 ORN/GRN (12) ACCY (SW)
- (304) 16 YEL/BLK (13) FAN LOW
- (305) 16 GRN/BLK (14) FAN HIGH
- (405) 16 RED/YEL (15) ACCESSORY



- ( ) EMPTY (E)

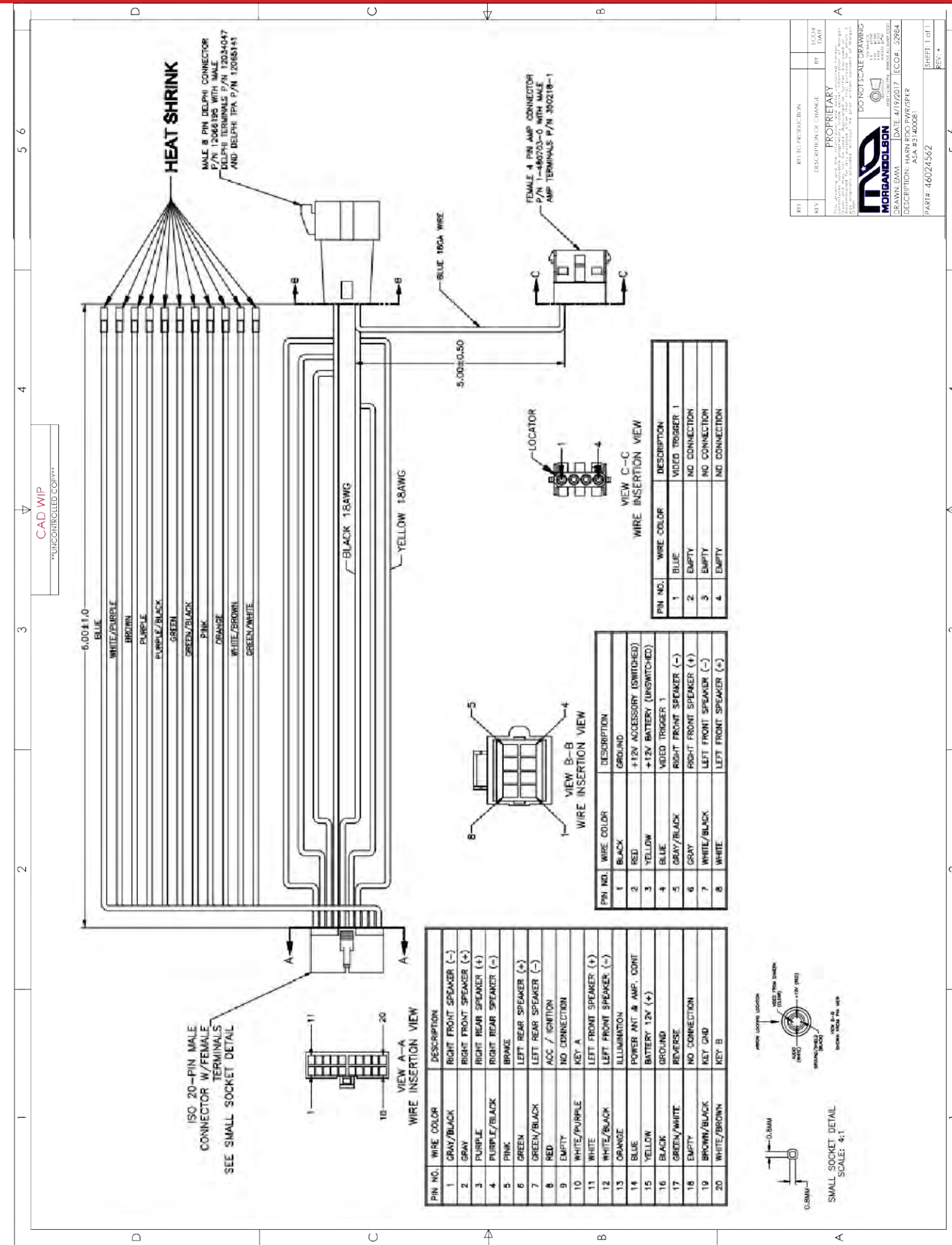
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**MORGAN OLSON**

GENERAL STANDARDS (UNLESS OTHERWISE NOTED):  
1. DIMENSIONS - U.S. UNITS  
2. DIMENSIONS - METRIC UNITS  
3. DIMENSIONS - MILLIMETERS  
4. DIMENSIONS - INCHES  
5. DIMENSIONS - FEET AND INCHES  
6. DIMENSIONS - FEET AND INCHES AND MILLIMETERS  
7. DIMENSIONS - MILLIMETERS AND INCHES  
8. DIMENSIONS - INCHES AND MILLIMETERS  
9. DIMENSIONS - MILLIMETERS AND INCHES  
10. DIMENSIONS - INCHES AND MILLIMETERS

TMC 07-1852  
20DEC07  
DO NOT SCALE  
HARN ROOF NOSE  
2008 SEED TRUCK  
2P DYN PK WPR

DRAWING NO. 007391210  
SCALE NONE  
REV A



SMALL SOCKET DETAIL  
SCALE: 4:1

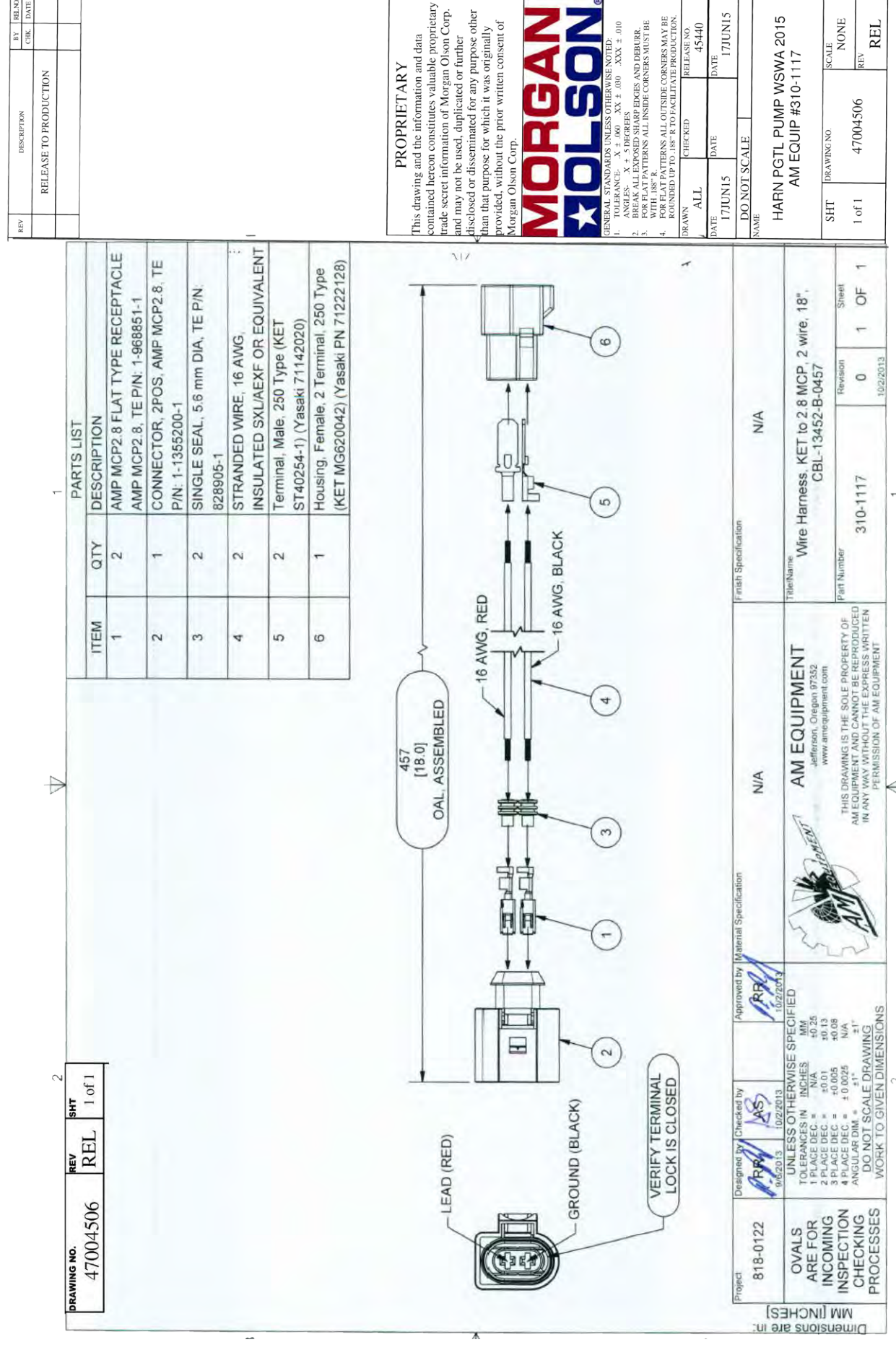
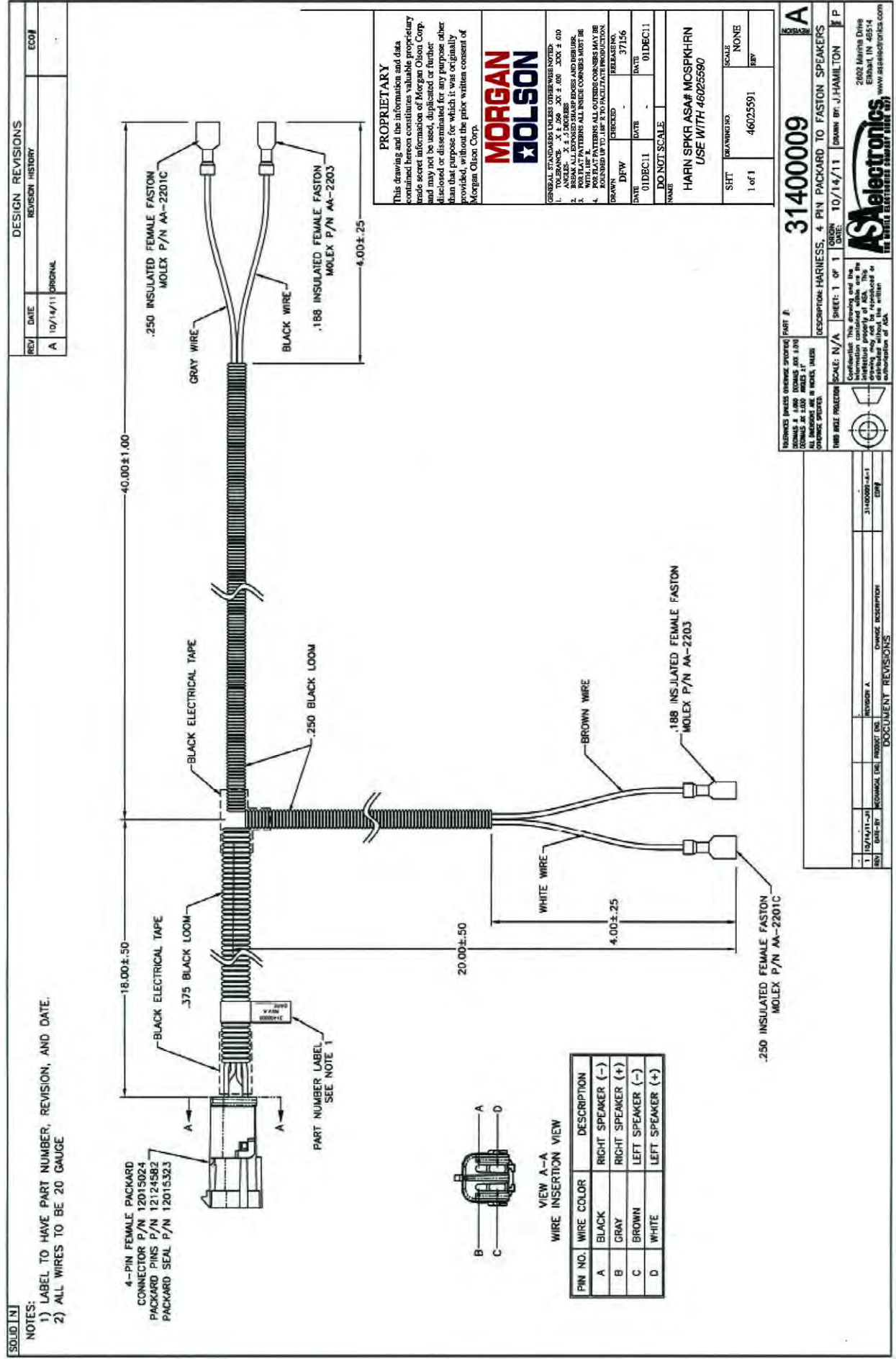
REV	DESCRIPTION	BY	DATE
1	PROPRIETARY		

DO NOT SCALE DRAWING

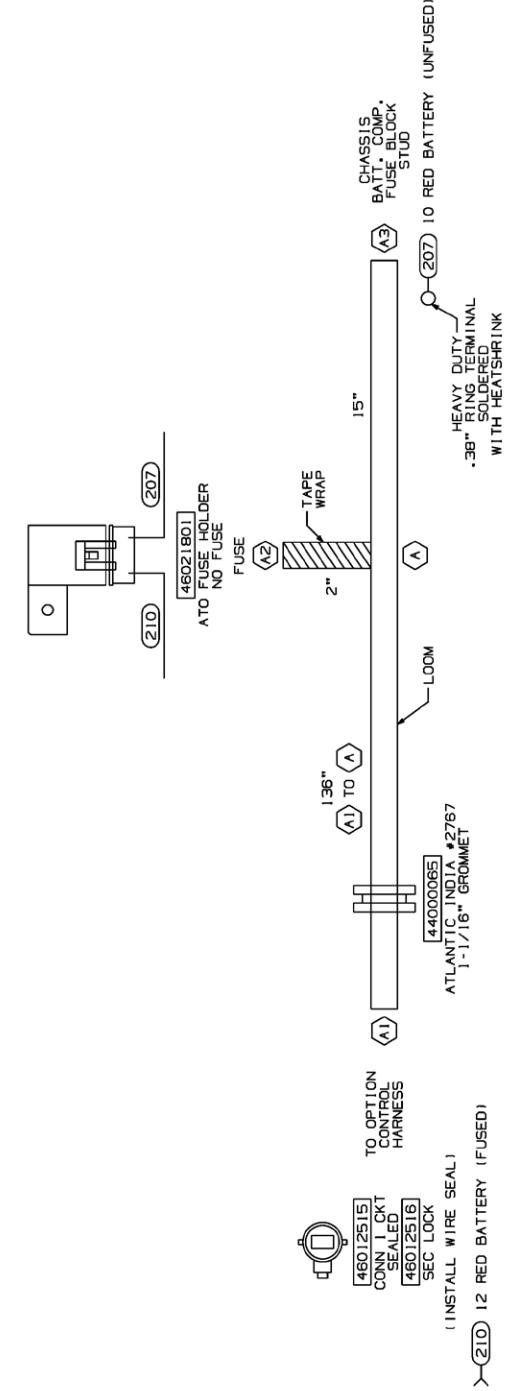
**MORGAN OLSON**

DRAWN BY: HARN ROOF NOSE  
DATE: 4/19/2017  
ECO#: 32984  
DESCRIPTION: HARN ROOF NOSE WPR  
PART#: 46024562

SHEET 1 OF 1  
REV. A



CIRCUIT	GAUGE/COLOR	END POINTS	FUNCTION
207	10 RED	A2,A3	BATTERY (UNFUSED)
210	12 RED	A1,A2	BATTERY (FUSED)



BASED ON:  
071093201

**HARNES AND LOOM TOLERANCES**  
 LP TO 60" = -0/+2"  
 60" TO 100" = -0/+4"  
 100" TO 200" = -0/+5"  
 200" TO 400" = -0/+6"  
 400" TO 600" = -0/+7"  
 OVER 600" = -0/+8"  
 80 TO 80 = -0/+2"  
 TOLERANCE IS NOT APPLICABLE TO OVERALL HARNESS LENGTH, BREAKOUT TO END, OR LOOM.

NOTES:  
1. GXL WIRE.

- SEALED CONNECTORS AS NOTED TO BE GREASED WITH TRUCK-LITE NYK-77 CORROSION PREVENTATIVE COMPOUND OR EQUIV.
- THIS IS A PURCHASED HARNESS. NO BILL OF MATERIAL EXISTS.
- VENDOR TO REPLACE PIGTAILS WITH WIRING TO APPROVED MOLDINGS OR CONNECTORS. PIGTAILS SHOWN IN TERMINAL VIEW. VENDOR PART NUMBER SHOWN FOR REFERENCE ONLY.
- HARNESS TO BE TESTED FOR CONTENT, OPENS, SHORTS, AND CONTINUITY.
- CONNECTORS SHOWN FROM WIRE ENTRY SIDE UNLESS OTHERWISE NOTED.
- SPLICES TO BE AUTOMATED WITH HEAT SHRINK TUBING.
- TAPE [1111098]: 6" AT BREAKOUTS AND 2" AT LOOM ENDS.
- HARNESS TO HAVE A LABEL PART NUMBER, MORGAN OLSON LEVEL, AND DATE OF MANUFACTURE.
- SPLIT POLY LOOM UNLESS OTHERWISE NOTED.
- GXL WIRE.

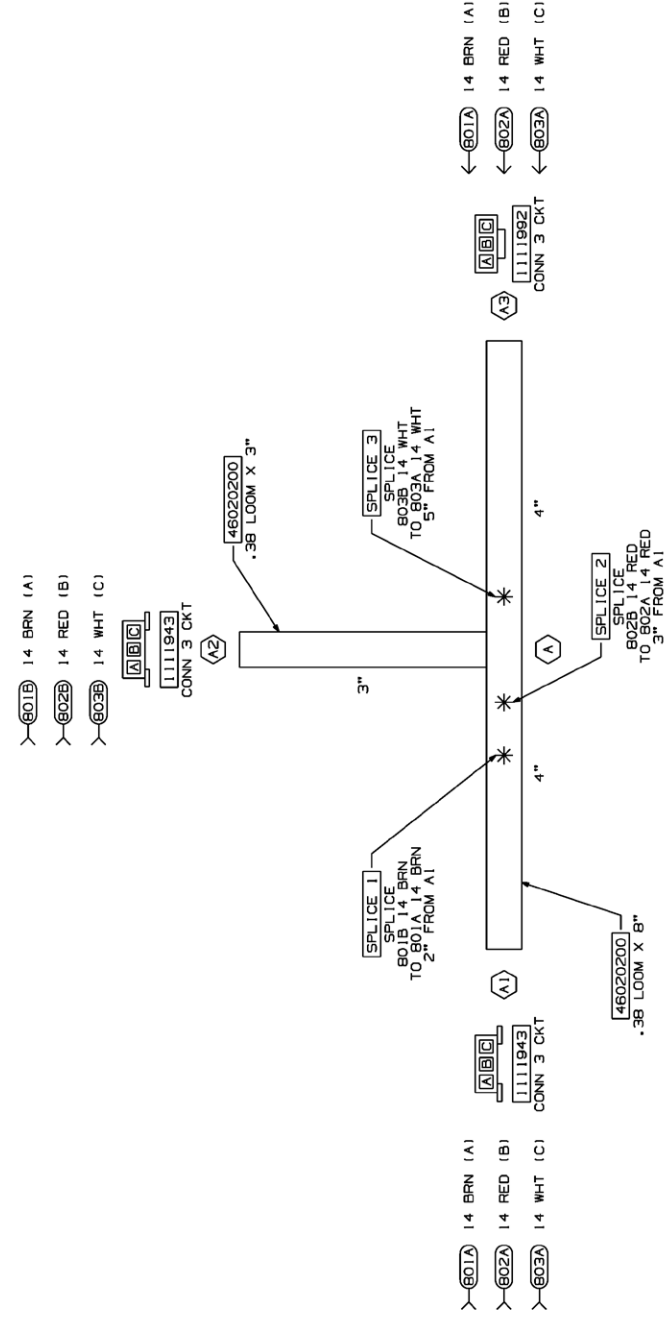
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**GENERAL STANDARDS UNLESS OTHERWISE NOTED:**  
 1. HARNESS: 1, 0.5 AMP. .008 I.D.  
 2. WIRE: 1.0mm DIA. UNLESS OTHERWISE NOTED  
 3. WIRE TIGHTENING TORQUE: 2.5 N.M.  
 4. ALL DIMENSIONS UNLESS OTHERWISE NOTED ARE IN MILLIMETERS.  
 DATE: 08/20/17  
 DWG: DFW  
 DESIGNED BY: 08-0010  
 CHECKED BY: 08/AN08  
 DO NOT SCALE  
 NAME: HARN-PWR, OPTION, FROM BATT  
 DRAWING NO.: 082091200  
 SHEET NO.: NONE  
 REV: 1 OF 1

REV	DESCRIPTION	DATE
1	RELEASE FOR PRODUCTION	

CIRCUIT	DESCRIPTION	END POINTS	FUNCTION
B01A	14 BRN 008 11111944 OE 4601B504	A1,A3	GENERIC
B01B	14 BRN 005 11111944 OE STR .25	A2,SPLICE 1	GENERIC
B02A	14 RED 008 11111944 OE 4601B504	A1,A3	GENERIC
B02B	14 RED 004 11111944 OE STR .25	A2,SPLICE 2	GENERIC
B03A	14 WHT 008 11111944 OE 4601B504	A1,A3	GENERIC
B03B	14 WHT 004 11111944 OE STR .24	A2,SPLICE 3	GENERIC



**HARNES AND LOOM TOLERANCES**  
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 60" TO 100" = -0/+4"  
 100" TO 200" = -0/+5"  
 200" TO 400" = -0/+6"  
 400" TO 600" = -0/+7"  
 OVER 600" = -0/+8"  
 80 TO 80 = -0/+2"  
 TOLERANCE IS NOT APPLICABLE TO OVERALL HARNESS LENGTH, BREAKOUT TO END, OR LOOM.

NOTES:  
1. GXL WIRE.

- VENDOR TO REPLACE PIGTAILS WITH WIRING TO APPROVED MOLDINGS OR CONNECTORS. PIGTAILS SHOWN IN TERMINAL VIEW.
- HARNESS TO BE TESTED FOR CONTENT, OPENS, SHORTS, AND CONTINUITY.
- CONNECTORS SHOWN FROM WIRE ENTRY SIDE UNLESS OTHERWISE NOTED.
- SPLICES TO BE AUTOMATED WITH HEAT SHRINK TUBING. HEAT SHRINK BUTT SPLICES ARE ACCEPTABLE FOR GO FABRICATION IF NECESSARY.
- TAPE [1111098]: 6" AT BREAKOUTS AND 2" AT LOOM ENDS.
- HARNESS TO HAVE A LABEL PART NUMBER, MORGAN OLSON LEVEL, AND DATE OF MANUFACTURE.
- SPLIT POLY LOOM UNLESS OTHERWISE NOTED.
- GXL WIRE.

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**GENERAL STANDARDS UNLESS OTHERWISE NOTED:**  
 1. HARNESS: 1, 0.5 AMP. .008 I.D.  
 2. WIRE: 1.0mm DIA. UNLESS OTHERWISE NOTED  
 3. WIRE TIGHTENING TORQUE: 2.5 N.M.  
 4. ALL DIMENSIONS UNLESS OTHERWISE NOTED ARE IN MILLIMETERS.  
 DATE: 08/20/17  
 DWG: TMC  
 DESIGNED BY: 02-0241  
 CHECKED BY: 02/FEB02  
 DO NOT SCALE  
 NAME: JUMPER-HARN TEE-GENERIC  
 DRAWING NO.: 88117437  
 SHEET NO.: NONE  
 REV: 1 OF 1

CIRCUIT	DESCRIPTION	END POINTS	FUNCTION
000	16 WHIT 46018100 OE 46019324	A,B	SWITCHED GROUND FOR 1ND LIGHT

DRAWING NO.	88117487	REV		SHT	1 of 1
REV.	DESCRIPTION	BY	DATE		
	RELEASE TO PRODUCTION				

- VENDOR MAY REPLACE WITH APPROVED MOLDINGS OR CONNECTORS. PIGTAILS SHOWN IN TERMINAL VIEW.
- HARNESSES TO BE TESTED FOR CONTENT OPENS, SHORTS, AND CONTINUITY.
- CONNECTORS SHOWN FROM THE VIEWER'S PERSPECTIVE UNLESS OTHERWISE NOTED.
- SPLICES TO BE AUTOMATED WITH HEATED MIRRORS. HEAT SHRINK BULLETS ARE ACCEPTABLE FOR W/O FABRICATION IF NECESSARY.
- TAPE [1111096]: 6" AT BREAKOUTS AND 2" AT LOOM ENDS.
- HARNESSES TO HAVE A LABEL SHOWING MORGAN OLSON PART NUMBER, REVISION LEVEL AND DATE OF MANUFACTURE.
- SPLIT POLY LOOM UNLESS OTHERWISE NOTED.

NOTES:

1. GXL WIRE.

PROPRIETARY

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GENERAL STANDARDS UNLESS OTHERWISE NOTED: .0001" .010

- ALL DIMENSIONS ARE IN INCHES.
- ALL DIMENSIONS ARE TO CENTER UNLESS OTHERWISE NOTED.
- ALL DIMENSIONS ARE TO CENTER UNLESS OTHERWISE NOTED.
- ALL DIMENSIONS ARE TO CENTER UNLESS OTHERWISE NOTED.

TMC	TMC	07-1345
DATE	DATE	DATE
30AUG07	30AUG07	30AUG07

DO NOT SCALE

HARNESSES AND LOOM TOLERANCES	
UP TO 60" : -0/+2"	
60" TO 100" : -0/+4"	
100" TO 200" : -0/+5"	
200" TO 400" : -0/+6"	
400" TO 600" : -0/+7"	
OVER 600" : -0/+8"	
50 TO 80 : -0/+2"	

TOLERANCE IS NOT ACCUMULATIVE. LENGTHS APPLY TO OVERALL HARNESSES. LENGTH BREAKOUT TO END, OR LOOM.

INTENDED USE:  
TO CONVERT A FLEET MAG SW TO PLUG AND PLAY BULLETS



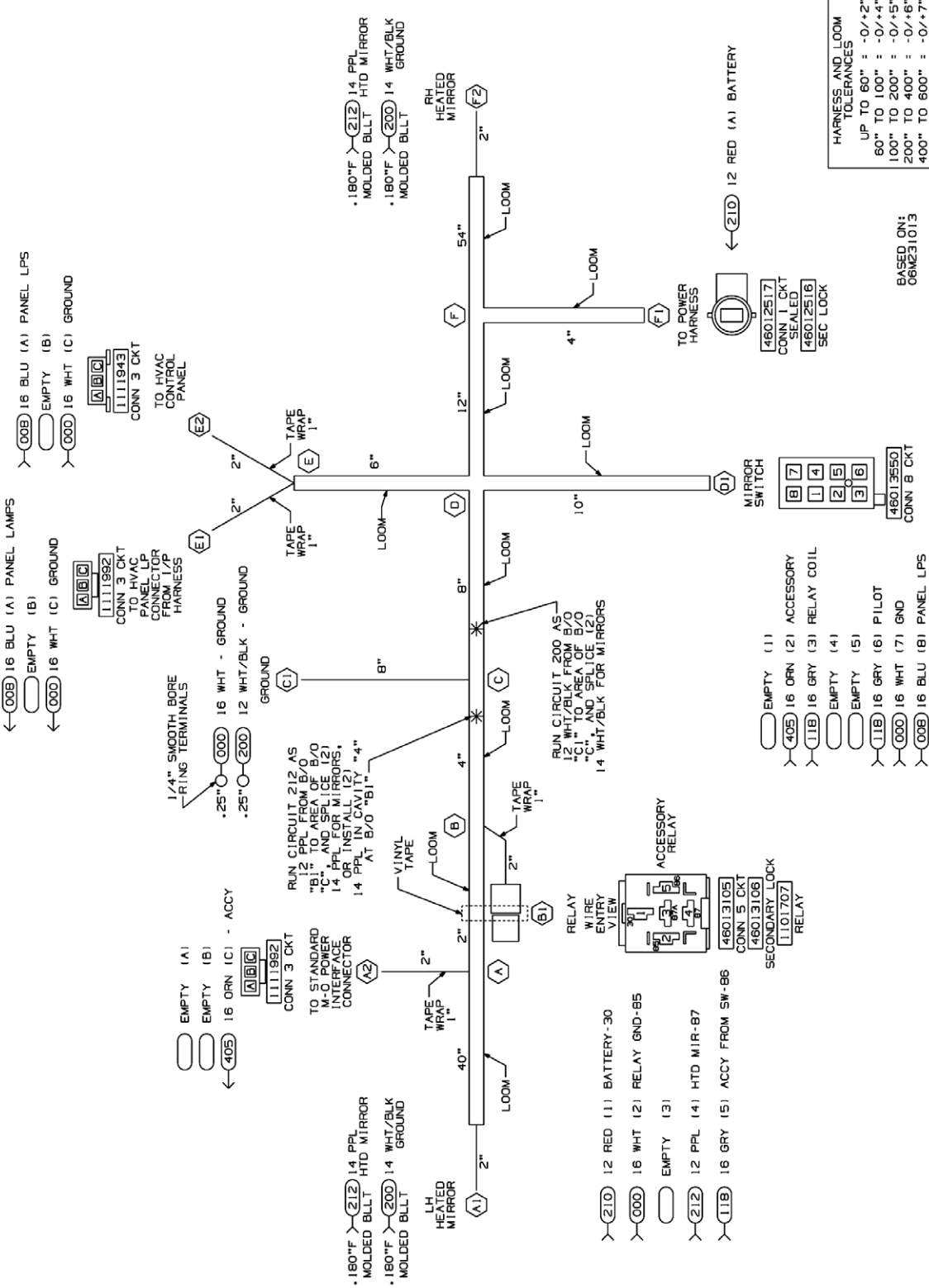
HARNESSES AND LOOM TOLERANCES

UP TO 60" : -0/+2"
60" TO 100" : -0/+4"
100" TO 200" : -0/+5"
200" TO 400" : -0/+6"
400" TO 600" : -0/+7"
OVER 600" : -0/+8"
50 TO 80 : -0/+2"

TOLERANCE IS NOT ACCUMULATIVE. LENGTHS APPLY TO OVERALL HARNESSES. LENGTH BREAKOUT TO END, OR LOOM.

CIRCUIT	DESCRIPTION	END POINTS	FUNCTION
000	16 WHIT	B1,C1,D1,E1,E2	GROUND
008	16 BLU	D1,E1,E2	PANEL LAMPS
118	16 GRN	B1,D1,D1	SWITCHED ACCY
200	12/14 WHIT/BLK	A1,C1,F2	GROUND - MIRRORS
210	12 RED	B1,F1	FUSED FEED FROM BATTERY
212	12/14 PPL	A1,B1,F2	RELAY OUTPUT TO MIRRORS
405	16 ORN	A2,D1	ACCESSORY CIRCUIT

DRAWING NO.	090051201	REV		SHT	1 of 1
REV.	DESCRIPTION	BY	DATE		
	RELEASE FOR PRODUCTION				



HARNESSES AND LOOM TOLERANCES

UP TO 60" : -0/+2"
60" TO 100" : -0/+4"
100" TO 200" : -0/+5"
200" TO 400" : -0/+6"
400" TO 600" : -0/+7"
OVER 600" : -0/+8"
50 TO 80 : -0/+2"

LENGTHS APPLY FROM BREAKOUT TO WIRE OR BREAKOUT TO WIRE FOR 31 END OF COVER.

INTENDED USE:  
TO PROVIDE POWER FOR DUAL HEATED MIRRORS WITH ROCKER SWITCH ON DASH WITH ENOUGH POWER FOR HEATED RECTANGULAR MIRROR AND HEATED CONVEX MIRROR ON EACH SIDE. REQUIRES POWER HARN FROM UNDER HOOD.

BASED ON:  
06A231013

CONN 8 CKT

CONN 5 CKT

CONN 1 CKT

CONN 3 CKT

CONN 6 CKT

CONN 7 CKT

CONN 8 CKT

DRAWING NO.	REV	SHT
090086200	C	1 of 1

REV	DESCRIPTION	BY	DATE
1	RELEASE FOR PRODUCTION		
2	REVISIONS		
3	REVISIONS		
4	REVISIONS		
5	REVISIONS		
6	REVISIONS		
7	REVISIONS		
8	REVISIONS		
9	REVISIONS		

- WHEN ISOLATED STOP CIRCUIT 005 IS USED, CIRCUITS 002 AND 003 REMAIN ACTIVE. CONNECTION OF THEM CAN BECOME TURN ONLY BY UNPLUGGING THE BRAKE FEED INTO TURN SIGNAL SWITCH.
- VENDOR MAY REPLACE PIGTAILS WITH WIRING TO APPROVED MOLDINGS OR CONNECTORS. PIGTAILS SHOWN IN TERMINAL VIEW.
- HARNESS TO BE TESTED FOR CONTENT, OPENS, SHORTS, AND CONTINUITY.
- CONNECTORS SHOWN FROM WIRE ENTRY SIDE, UNLESS OTHERWISE NOTED.
- SPLICES TO BE AUTOMATED WITH SOLDER, AND ADHESIVE LINED HEAT SHRINK TUBING.
- TAPE [1111096]: 6" AT BREAKOUTS AND 2" AT LOOM ENDS.
- SHOWING MORGAN OLSON PART NUMBER, REVISION NUMBER AND DATE OF MANUFACTURE.
- SPLIT POLY LOOM UNLESS OTHERWISE NOTED.
- GXL WIRE.

NOTES:

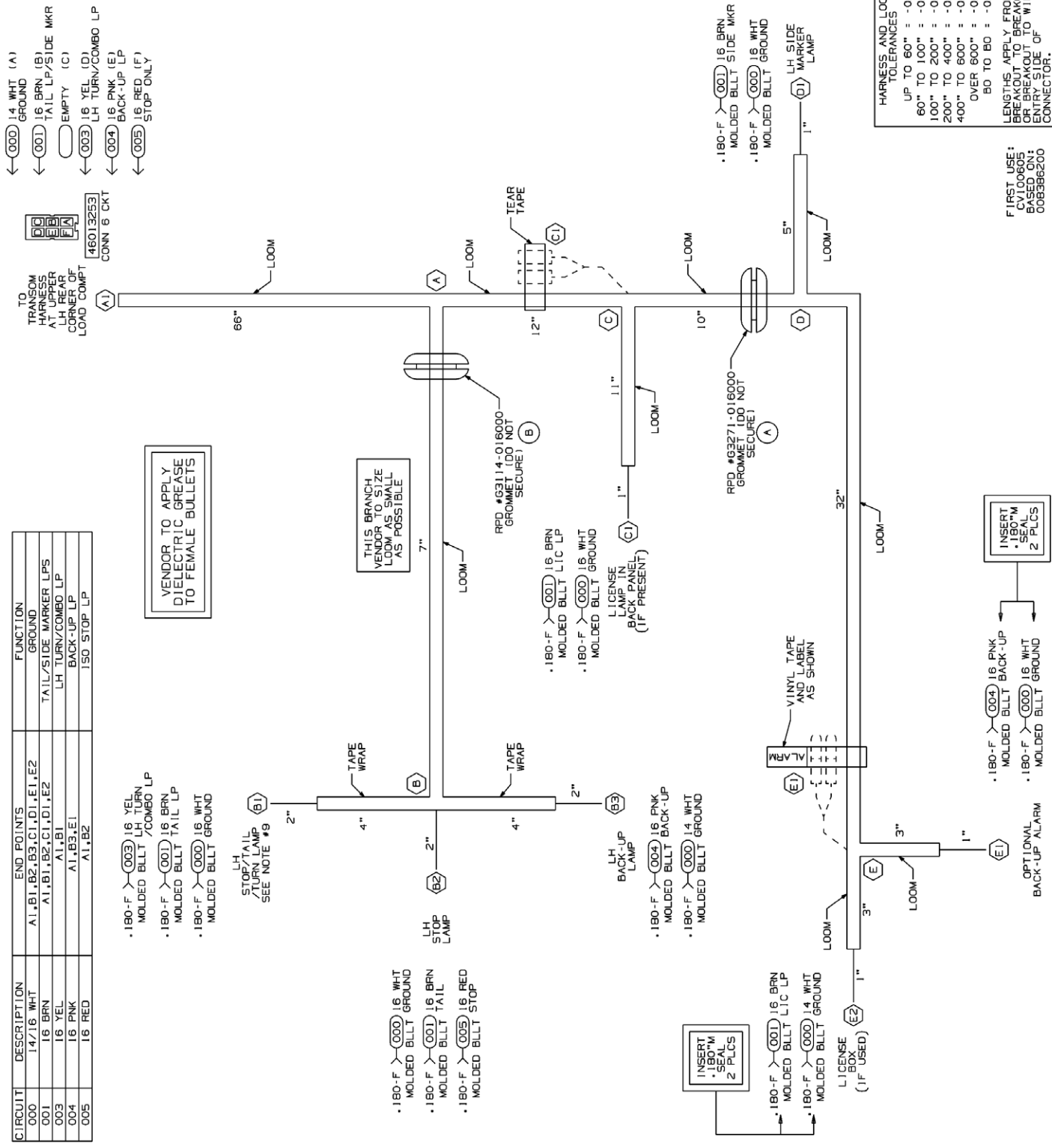
**PROPRIETARY**  
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<b>MORGAN OLSON</b>	
GENERAL STANDARD UNLESS OTHERWISE NOTED:	
1. WIRE GAUGE: 16 AWG	WIRE COLOR: SEE NOTE #9
2. WIRE ALL STRIPPED SHOWN UNLESS OTHERWISE NOTED	
3. WIRE END LENGTHS: 1.5" UNLESS OTHERWISE NOTED	
4. WIRE END LENGTHS: 2.5" UNLESS OTHERWISE NOTED	
5. WIRE END LENGTHS: 3.5" UNLESS OTHERWISE NOTED	
DATE: 01AUG09	DATE: 27B40
DO NOT SCALE	DATE: 01AUG09
HARN RR WRG LH BPNL WCC/FCC P&P .180" BLLTS WRG THRU RF 2009 M-100	
DRAWING NO.	SCALE
090086200	NONE
SHT	REV
1 of 1	C

HARNESS AND LOOM TOLERANCES	
UP TO 60"	: -0/+2"
60" TO 100"	: -0/+4"
100" TO 200"	: -0/+5"
200" TO 400"	: -0/+6"
400" TO 600"	: -0/+7"
OVER 600"	: -0/+8"
80 TO 80"	: -0/+2"

LENGTHS APPLY FROM BREAKOUT TO BREAKOUT, OR BREAKOUT TO WIRE ENTRY SIDE OF CONNECTOR.

FIRST USE: 090086200 BASED ON: 006366200



DRAWING NO.	REV	SHT
092086205	A	1 of 1

REV	DESCRIPTION	BY	DATE
1	RELEASE FOR PRODUCTION		
2	REVISIONS		
3	REVISIONS		
4	REVISIONS		
5	REVISIONS		
6	REVISIONS		
7	REVISIONS		
8	REVISIONS		
9	REVISIONS		

- WHEN ISOLATED STOP CIRCUIT 005 IS USED, CIRCUIT 002 CAN REMAIN AS COMBINATION OR CAN BECOME TURN ONLY BY UNPLUGGING BRAKE FEED INTO TURN SIGNAL SWITCH.
- VENDOR MAY REPLACE PIGTAILS WITH WIRING TO APPROVED MOLDINGS OR CONNECTORS. PIGTAILS SHOWN IN TERMINAL VIEW.
- HARNESS TO BE TESTED FOR CONTENT, OPENS, SHORTS, AND CONTINUITY.
- CONNECTORS SHOWN FROM WIRE ENTRY SIDE, UNLESS OTHERWISE NOTED.
- SPLICES TO BE AUTOMATED WITH SOLDER, AND ADHESIVE LINED HEAT SHRINK TUBING.
- TAPE [1111096]: 6" AT BREAKOUTS AND 2" AT 18" INTERVALS FOR UNINTERRUPTED LOOM LENGTHS GREATER THAN 24", AND 2" AT LOOM ENDS.
- HARNESS TO HAVE A LABEL SHOWING MORGAN OLSON PART NUMBER, REVISION NUMBER AND DATE OF MANUFACTURE.
- SPLIT POLY LOOM UNLESS OTHERWISE NOTED.
- GXL WIRE.

NOTES:

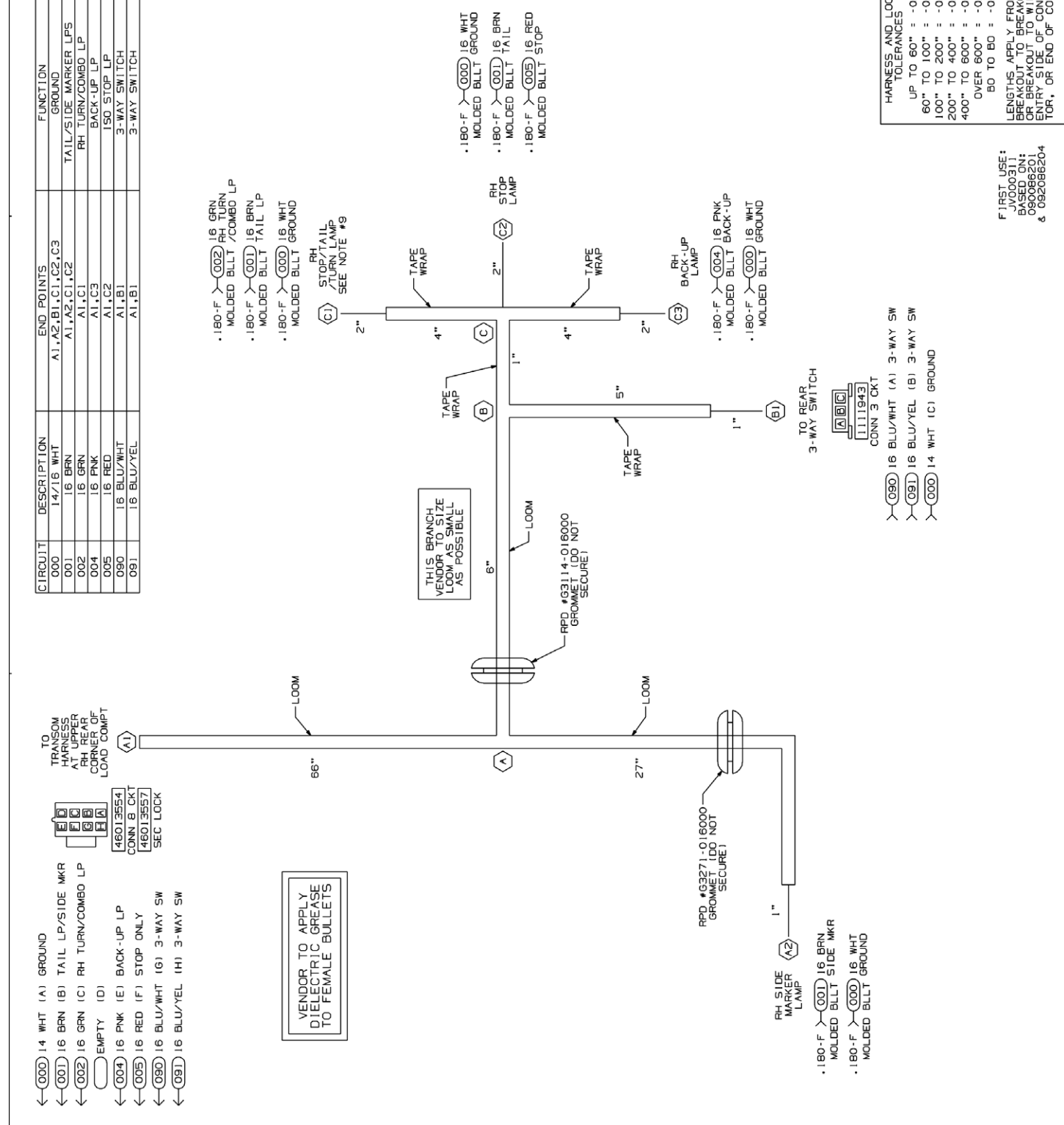
**PROPRIETARY**  
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<b>MORGAN OLSON</b>	
GENERAL STANDARD UNLESS OTHERWISE NOTED:	
1. WIRE GAUGE: 16 AWG	WIRE COLOR: SEE NOTE #9
2. WIRE ALL STRIPPED SHOWN UNLESS OTHERWISE NOTED	
3. WIRE END LENGTHS: 1.5" UNLESS OTHERWISE NOTED	
4. WIRE END LENGTHS: 2.5" UNLESS OTHERWISE NOTED	
5. WIRE END LENGTHS: 3.5" UNLESS OTHERWISE NOTED	
DATE: 24SEP09	DATE: 28410
DO NOT SCALE	DATE: 24SEP09
HARN RR WRG RH BPNL 2009 CFF NON D/FLR	
DRAWING NO.	SCALE
092086205	NONE
SHT	REV
1 of 1	A

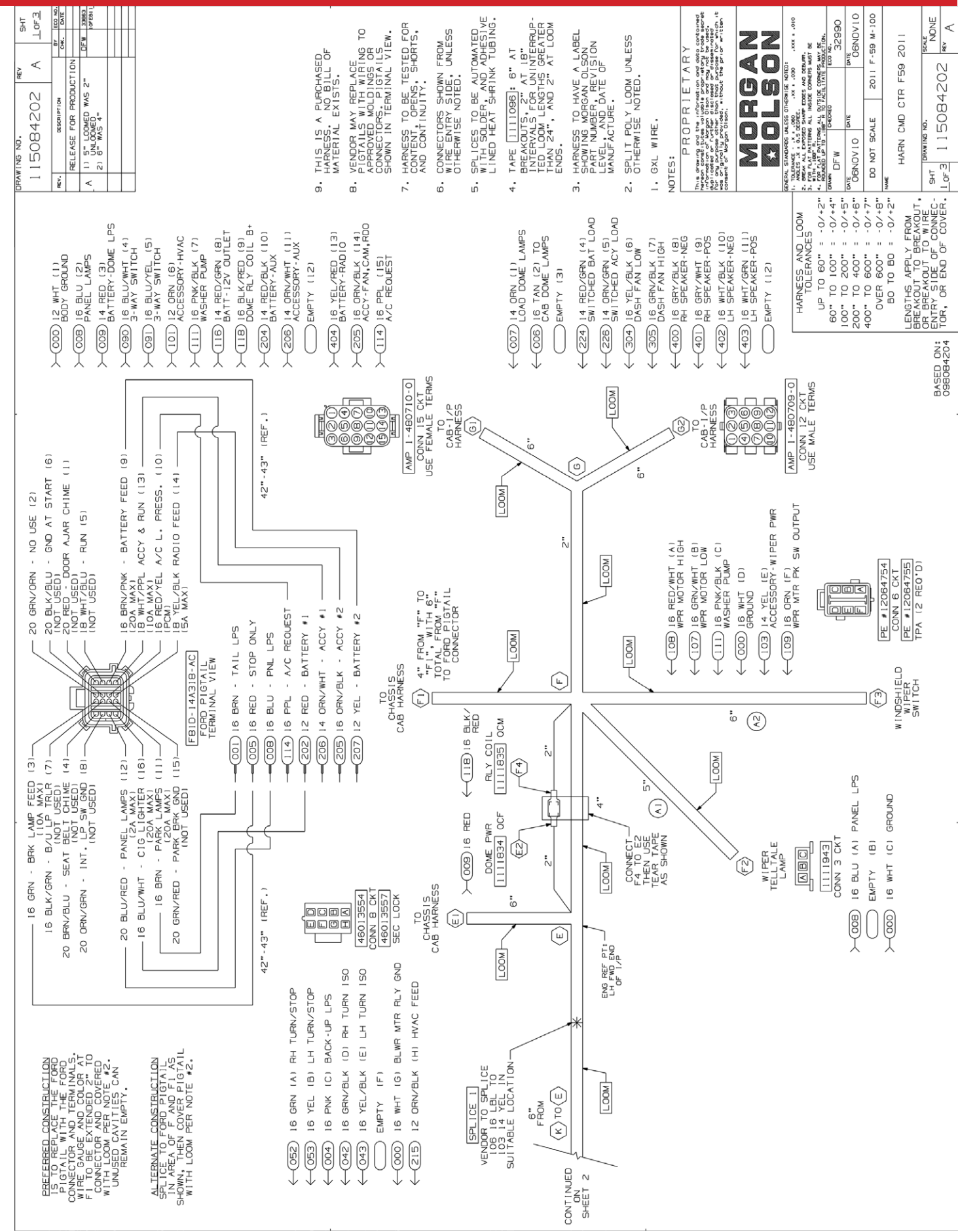
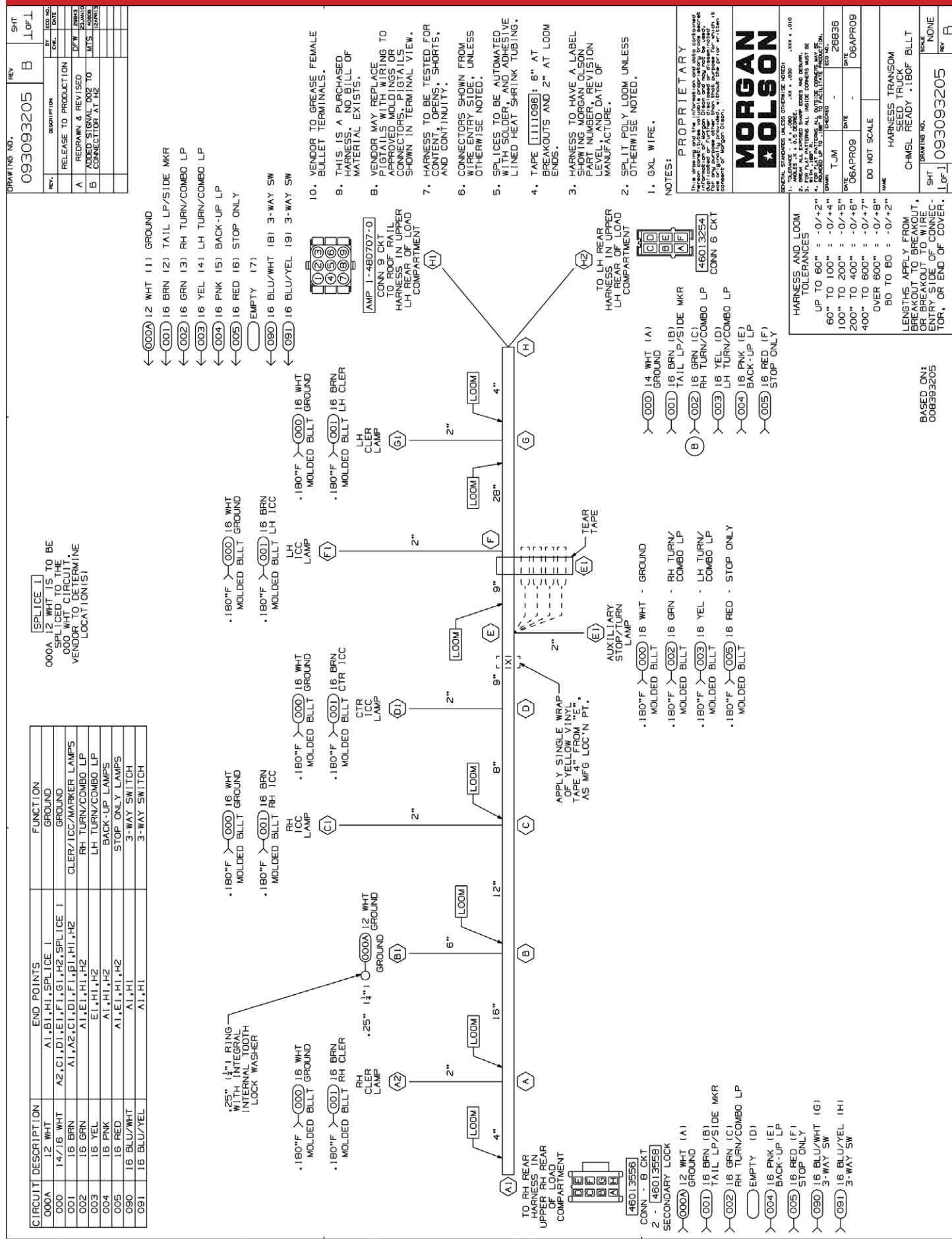
HARNESS AND LOOM TOLERANCES	
UP TO 60"	: -0/+2"
60" TO 100"	: -0/+4"
100" TO 200"	: -0/+5"
200" TO 400"	: -0/+6"
400" TO 600"	: -0/+7"
80 TO 80"	: -0/+2"

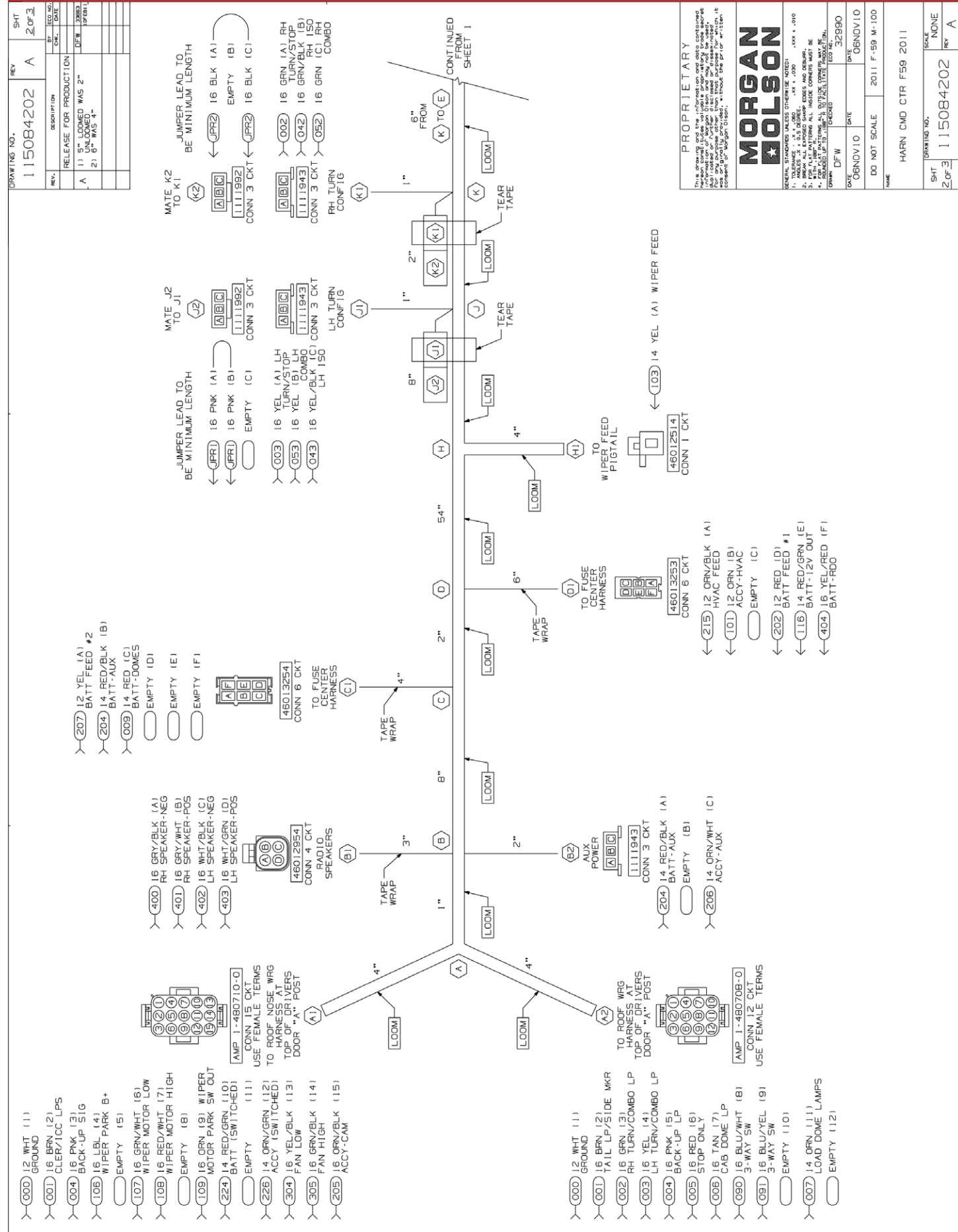
LENGTHS APPLY FROM BREAKOUT TO BREAKOUT, OR BREAKOUT TO WIRE ENTRY SIDE OF CONNECTOR, OR END OF COVER.

FIRST USE: 092086205 BASED ON: 006366201 & 092086204









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**MORGAN  
MOLSON**

GENERAL STANDARD UNLESS OTHERWISE NOTED:  
1. DIMENSIONS: .0015 INCHES  
2. DIMENSIONS: .0015 INCHES  
3. DIMENSIONS: .0015 INCHES  
4. DIMENSIONS: .0015 INCHES  
5. DIMENSIONS: .0015 INCHES  
6. DIMENSIONS: .0015 INCHES  
7. DIMENSIONS: .0015 INCHES  
8. DIMENSIONS: .0015 INCHES  
9. DIMENSIONS: .0015 INCHES  
10. DIMENSIONS: .0015 INCHES

DATE: 06NOV10  
DWG NO: 32890  
DO NOT SCALE  
HARN CMD CTR F59 2011

DRAWING NO. 115084202  
SHT 2 OF 3  
SCALE NONE  
REV A

DRAWING NO. 115084202  
SHT 3 OF 3

RELEASE FOR PRODUCTION:  
1) 5" LOOKED WAS 2"  
2) 6" WAS 4"

CIRCUIT	DESCRIPTION	END POINTS	FUNCTION
000	12/16 WHT	A1,A2,E1,F2,F3,G1	GROUND
001	16 BRN	A1,A2,F1	TAIL/CLERK/MKR LAMPS
002	16 GRN	A2,K1	RIGHT HAND TURN/STOP LAMP
003	16 YEL	A2,J1	LEFT HAND TURN/STOP LAMP
004	16 PNK	A1,A2,E1	BACK-UP LP SIGNAL
005	16 RED	A2,F1	STOP ONLY LAMP
006	16 TAN	A2,G2	CAB DOME LAMP
007	14 ORN	A2,G2	LOAD DOME LAMP(S)
008	16 BLU	F1,F2,G1	DASH ILLUM
009	14/16 RED	C1,E2,G1	BATTERY-DOME LAMP
042	16 GRN/BLK	E1,K1	RH TURN ISO
043	16 YEL/BLK	E1,J1	LH TURN ISO
053	16 GRN	E1,K1	RH TURN/STOP
090	16 BLU/WHT	A2,G1	LOAD DM 3W SW
091	16 BLU/YEL	A2,G1	LOAD DM 3W SW
101	12 ORN	D1,G1	ACCESSORY-ELECTRIC HVAC POWER
103	14 YEL	H1,F3,SPLICE 1	ACCESSORY WIPER POWER
106	16 LBL	A1,SPLICE 1	WIPER PARK (B+)
107	16 GRN/WHT	A1,F3	WIPER MOTOR LOW
108	16 RED/WHT	A1,F3	WIPER MOTOR HIGH
109	16 ORN	A1,F3	WPR MOTOR PARK SWITCH OUTPUT
111	16 PNK/BLK	F3,G1	WASHER PUMP
114	16 PPL	F1,G1	A/C REQUEST
116	14 RED/GRN	D1,G1	BATTERY-12V OUTLET/LTR
118	16 BLK/RED	F4,G1	LOAD DOME RELAY COIL (B+)
202	12 RED	D1,F1	BATTERY FEED #1
204	14 RED/BLK	B2,C1,G1	BATTERY-AUXILIARY
205	16 ORN/BLK	A1,F1,G1	ACCESSORY-FAN,CAM,RDD
206	14 ORN/WHT	B2,F1,G1	ACCESSORY-AUXILIARY
207	12 YEL	C1,F1	BATTERY FEED #2
215	12 ORN/BLK	D1,E1	ACCESSORY-HVAC FEED
224	14 RED/GRN	A1,G2	BATTERY-AUXILIARY SWITCHED
226	14 ORN/GRN	A1,G2	ACCESSORY-AUXILIARY SWITCHED
304	16 YEL/BLK	A1,G2	DASH FAN LOW
305	16 GRN/BLK	A1,G2	DASH FAN HIGH
*400	16 GRY/BLK	B1,G2	RH SPEAKER (-)
*401	16 GRY/WHT	B1,G2	LH SPEAKER (-)
*402	16 WHT/BLK	B1,G2	LH SPEAKER (+)
*403	16 WHT/GRN	B1,G2	LH SPEAKER (+)
404	16 YEL/RED	D1,G1	BATTERY-RADIO
JPR1	16 PNK	J2,J2	LH TURN JUMPER
JPR2	16 BLK	K2,K2	RH TURN JUMPER

\* OPTIONAL: CIRCUITS 400 & 401 MAY BE SUPPLIED AS STANDARD SPEAKER "ZIP CORD" PAIRS. CIRCUIT NUMBER AND CONNECTOR INDEXING MUST BE MAINTAINED AS SHOWN.

\* OPTIONAL: CIRCUITS 402 & 403 MAY BE SUPPLIED AS STANDARD SPEAKER "ZIP CORD" PAIRS. CIRCUIT NUMBER AND CONNECTOR INDEXING MUST BE MAINTAINED AS SHOWN.

**PROPRIETARY**  
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**MORGAN  
MOLSON**

GENERAL STANDARD UNLESS OTHERWISE NOTED:  
1. DIMENSIONS: .0015 INCHES  
2. DIMENSIONS: .0015 INCHES  
3. DIMENSIONS: .0015 INCHES  
4. DIMENSIONS: .0015 INCHES  
5. DIMENSIONS: .0015 INCHES  
6. DIMENSIONS: .0015 INCHES  
7. DIMENSIONS: .0015 INCHES  
8. DIMENSIONS: .0015 INCHES  
9. DIMENSIONS: .0015 INCHES  
10. DIMENSIONS: .0015 INCHES

DATE: 06NOV10  
DWG NO: 32890  
DO NOT SCALE  
HARN CMD CTR F59 2011

DRAWING NO. 115084202  
SHT 3 OF 3  
SCALE NONE  
REV A

DRAWING NO.	REV	SHT
115084203		1 OF 1
DESCRIPTION	DATE	
RELEASE FOR PRODUCTION		

- THIS IS A PURCHASED HARNESS. NO BILL OF MATERIAL EXISTS.
- BRAIDED POLYESTER SLEEVING TO BE CLOSED AT BOTH ENDS WITH 1-1/2" OF SHEATHING AND TAPED [111098] 6" AT BREAKOUTS.
- VENDOR MAY REPLACE PIGTAILS WITH WIRING TO APPROVED MOLDINGS OR CONNECTORS. PIGTAILS SHOWN IN TERMINAL VIEW.
- HARNESS TO BE TESTED FOR CONTENT, OPENS, SHORTS, AND CONTINUITY.
- CONNECTORS SHOWN FROM WIRE ENTRY SIDE, UNLESS OTHERWISE NOTED.
- SPLICES TO BE AUTOMATED WITH SOLDER, AND ADHESIVE LINED HEAT SHRINK TUBING.
- TAPE [111098]: 6" AT BREAKOUTS AND 2" AT LOOM ENDS.
- HARNESS TO HAVE A LABEL SHOWING MORGAN OLSON PART NUMBER, REVISION NUMBER, AND DATE OF MANUFACTURE.
- SPLIT POLY LOOM UNLESS OTHERWISE NOTED.
- 6XL WIRE.

**PROPRIETARY**

**MORGAN OLSON**

MINOR STANDARD UNLESS OTHERWISE NOTED.

1. VALUES: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.

DATE: 07NOV10  
DWG: 32990  
DO NOT SCALE  
DATE: F59 2011  
HARN FUSE CTR F59 2011

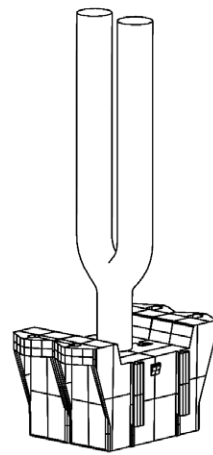
DRAWING NO. 115084203  
SCALE NONE  
REV

BASED ON: 095084202

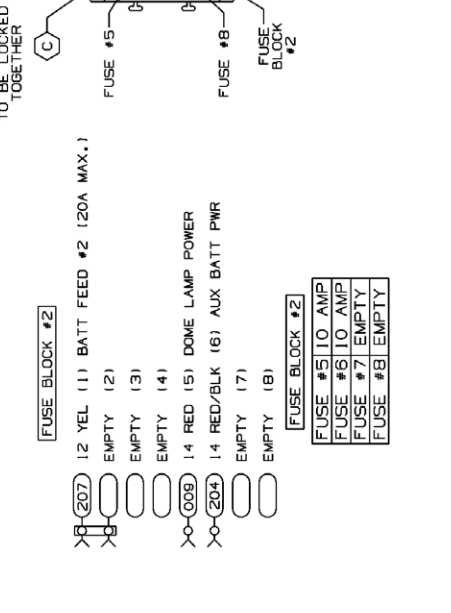
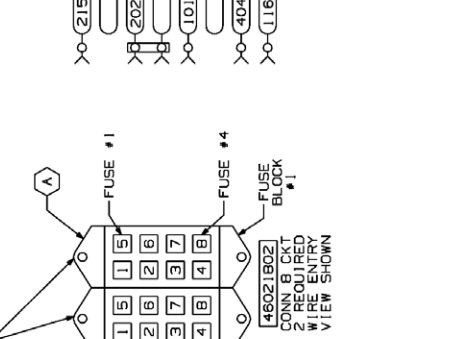
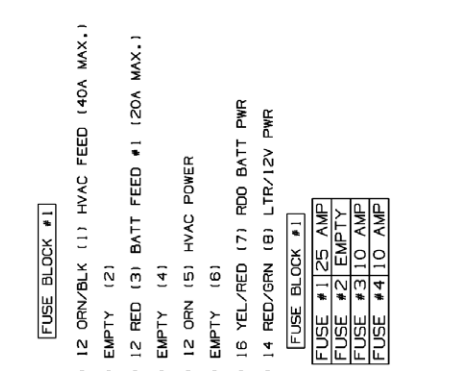
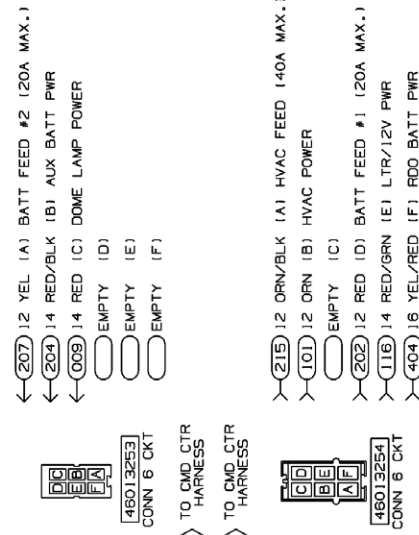
HARNESS AND LOOM TOLERANCES:

UP TO 60" = -0/-2"  
60" TO 100" = -0/-4"  
100" TO 200" = -0/-5"  
200" TO 400" = -0/-7"  
400" TO 600" = -0/-8"  
OVER 600" = -0/-2"

LENGTHS APPLY FROM BREAKOUT TO BREAKOUT, OR BREAKOUT TO WIRE ENTRY SIDE OF CONNECTION, OR END OF COVER.

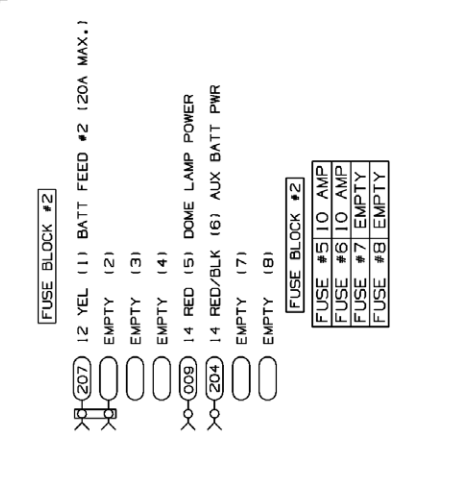
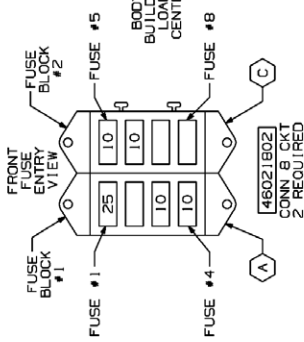


BUNDLE BOTH LEADS TOGETHER WITH SINGLE WRAP VINYL TAPE. SURE TO REPEL SURFACE OF FUSE BLOCKS



CIRCUIT	DESCRIPTION	END POINTS	FUNCTION
009	14 RED	C,D	DOME LAMP POWER
101	12 ORN	A,B	HVAC POWER
116	14 RED/GRN	A,B	LTR/12V POWER
202	12 RED	A,B	BATT FEED #1
204	14 RED/BLK	C,D	AUX BATT POWER
207	12 YEL	C,D	BATT FEED #2
215	12 ORN/BLK	A,B	HVAC FEED
404	16 YEL/RED	A,B	RADIO BATT POWER

NOTE: FUSES AND FUSE BLOCKS MUST BE CORRECTLY IDENTIFIED AS SHOWN BELOW



DRAWING NO.	REV	SHT
115085202		1 OF 1
DESCRIPTION	DATE	
RELEASE FOR PRODUCTION		

- VENDOR TO GREASE FEMALE BULLET TERMINALS.
- THIS IS A PURCHASED HARNESS. NO BILL OF MATERIAL EXISTS.
- VENDOR MAY REPLACE PIGTAILS WITH WIRING TO APPROVED MOLDINGS OR CONNECTORS. PIGTAILS SHOWN IN TERMINAL VIEW.
- HARNESS TO BE TESTED FOR CONTENT, OPENS, SHORTS, AND CONTINUITY.
- CONNECTORS SHOWN FROM WIRE ENTRY SIDE, UNLESS OTHERWISE NOTED.
- SPLICES TO BE AUTOMATED WITH SOLDER, AND ADHESIVE LINED HEAT SHRINK TUBING.
- TAPE [111098]: 6" AT BREAKOUTS, 2" AT INTER-RUPTED LOOM LENGTHS GREATER THAN 24", AND 2" AT LOOM ENDS.
- HARNESS TO HAVE A LABEL SHOWING MORGAN OLSON PART NUMBER, REVISION LEVEL, AND DATE OF MANUFACTURE.
- SPLIT NYLON LOOM, BLACK WITH GRAY STRIPE. VENDOR TO USE THE SMALLER SIZE SPECIFIED ON THE DRAWING.
- 6XL WIRE.

**PROPRIETARY**

**MORGAN OLSON**

MINOR STANDARD UNLESS OTHERWISE NOTED.

1. VALUES: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.

DATE: 03NOV10  
DWG: 32932  
DO NOT SCALE  
DATE: M-100 FORD F59

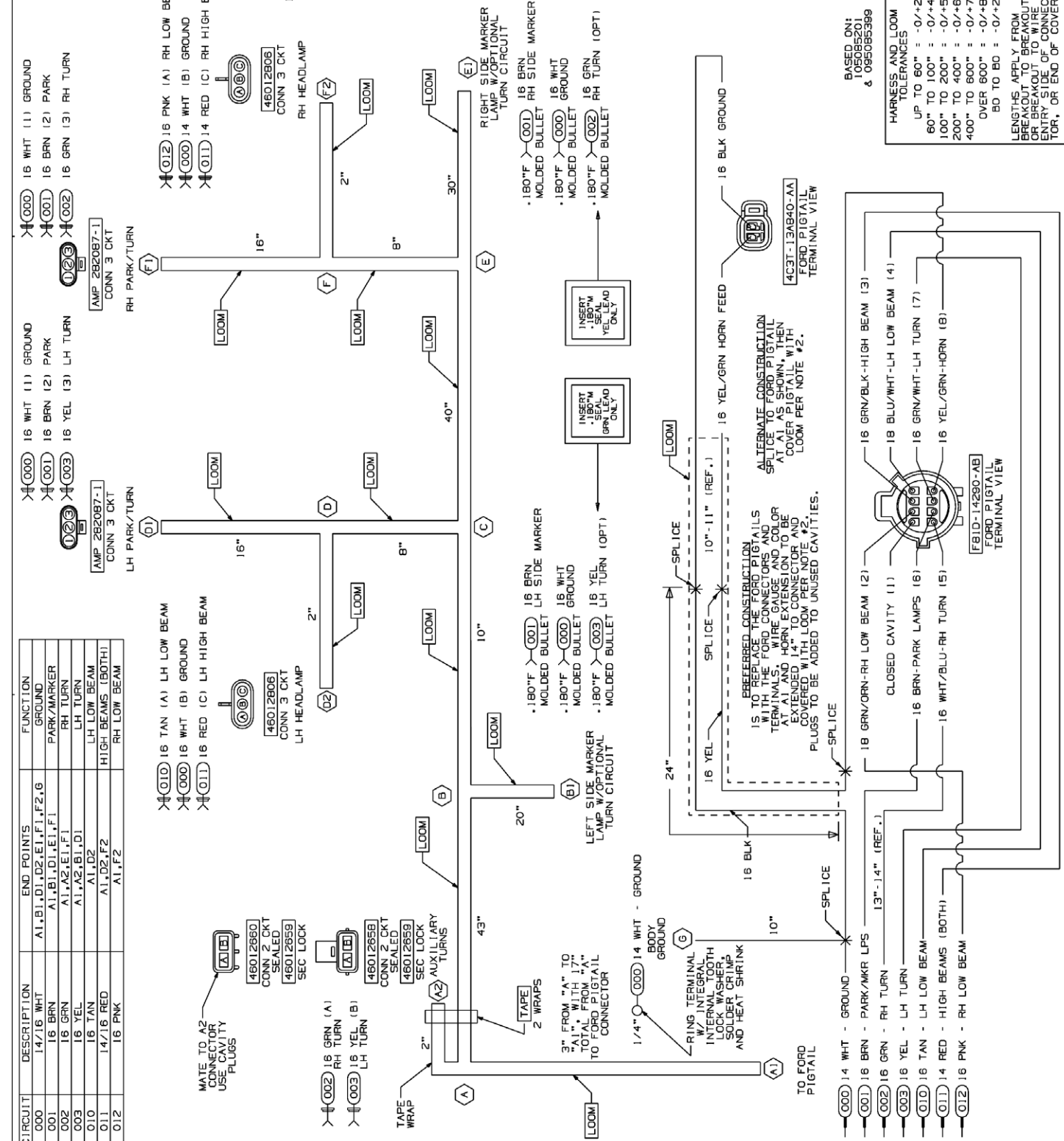
DRAWING NO. 115085202  
SCALE NONE  
REV

BASED ON: 10855202 & 095085999

HARNESS AND LOOM TOLERANCES:

UP TO 60" = -0/-2"  
60" TO 100" = -0/-4"  
100" TO 200" = -0/-5"  
200" TO 400" = -0/-7"  
400" TO 600" = -0/-8"  
OVER 600" = -0/-2"

LENGTHS APPLY FROM BREAKOUT TO BREAKOUT, OR BREAKOUT TO WIRE ENTRY SIDE OF CONNECTION, OR END OF COVER.

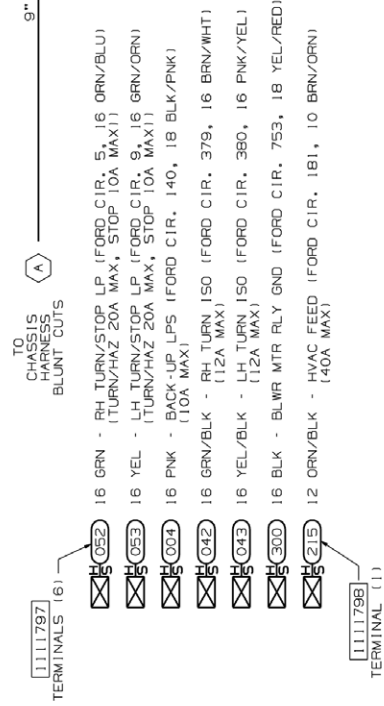
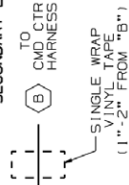


DRAWING NO.	115088201	REV		SHT	1 of 1
DESCRIPTION	RELEASE FOR PRODUCTION				
DATE		BY		DATE	

- 16 GRN (A) RH TURN/STOP LP
- 16 YEL (B) LH TURN/STOP LP
- 16 PNK (C) BACK-UP LPS
- 16 GRN/BLK (D) RH TURN ISO
- 16 YEL/BLK (E) LH TURN ISO
- EMPTY (F)
- 16 BLK (G) BLWR MTR RLY GND
- 12 ORN/BLK (H) HVAC FEED



46013556  
CONN - B CKT  
2 - 46013559  
SECONDARY LOCK



**HARNES AND LOOM TOLERANCES**

LP TO 60" : -0/+2"  
60" TO 100" : -0/+4"  
100" TO 200" : -0/+5"  
200" TO 400" : -0/+6"  
400" TO 600" : -0/+7"  
OVER 600" : -0/+8"  
80 TO 80 : -0/+2"

LENGTHS APPLY FROM BREAKOUT TO BREAKOUT OR BREAKOUT TO WIRE ENTRY SIDE OF CONNECTOR, OR END OF COVER.

BASED ON:  
095088397

DRAWING NO.	115088201	REV		SHT	1 of 1
DESCRIPTION	RELEASE FOR PRODUCTION				
DATE		BY		DATE	

**PROPRIETARY**

**MORGAN OLSON**

GENERAL STANDARD UNLESS OTHERWISE NOTED:

1. WIRE GAUGE : 16 AWG  
2. WIRE TYPE : 100% COPPER  
3. WIRE COLOR : AS SHOWN  
4. WIRE LENGTH : AS SHOWN  
5. WIRE ENTRY SIDE : AS SHOWN  
6. WIRE ENTRY SIDE : AS SHOWN  
7. WIRE ENTRY SIDE : AS SHOWN  
8. WIRE ENTRY SIDE : AS SHOWN  
9. WIRE ENTRY SIDE : AS SHOWN  
10. WIRE ENTRY SIDE : AS SHOWN

DATE: 06NOV10  
DWG: 32990  
SCALE: 1:1  
HARN JPR 1/P BLNT CUT  
F59 2011

DRAWING NO. 115088201

9. THIS IS A PURCHASED HARNES. NO BILL OF MATERIAL EXISTS.
  8. VENDOR MAY REPLACE PIGTAILS WITH WIRING TO APPROVED MOLDINGS OR CONNECTORS. PIGTAILS SHOWN IN TERMINAL VIEW.
  7. HARNES TO BE TESTED FOR CONTENT, OPENS, SHORTS, AND CONTINUITY.
  6. CONNECTORS SHOWN FROM WIRE ENTRY SIDE, UNLESS OTHERWISE NOTED.
  5. SPLICES TO BE AUTOMATED WITH SOLDER AND ADHESIVE LINED HEAT SHRINK TUBING.
  4. TAPE [1111096]: 6" AT BREAKOUTS AND 2" AT LOOM ENDS.
  3. HARNES TO HAVE A LABEL SHOWING MORGAN OLSON PART NUMBER, REVISION LEVEL, AND DATE OF MANUFACTURE.
  2. SPLIT POLY LOOM UNLESS OTHERWISE NOTED.
  1. GXL WIRE.
- NOTES:

DRAWING NO.	115088202	REV	A	SHT	1 of 1
DESCRIPTION	RELEASE FOR PRODUCTION				
DATE		BY		DATE	

**PROPRIETARY**

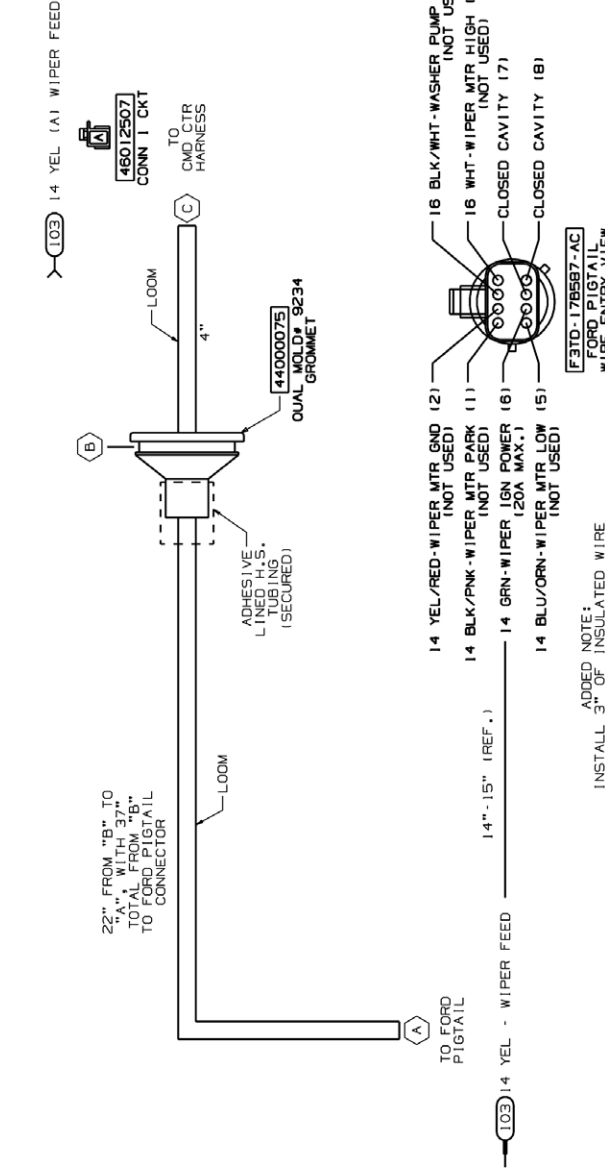
**MORGAN OLSON**

GENERAL STANDARD UNLESS OTHERWISE NOTED:

1. WIRE GAUGE : 16 AWG  
2. WIRE TYPE : 100% COPPER  
3. WIRE COLOR : AS SHOWN  
4. WIRE LENGTH : AS SHOWN  
5. WIRE ENTRY SIDE : AS SHOWN  
6. WIRE ENTRY SIDE : AS SHOWN  
7. WIRE ENTRY SIDE : AS SHOWN  
8. WIRE ENTRY SIDE : AS SHOWN  
9. WIRE ENTRY SIDE : AS SHOWN  
10. WIRE ENTRY SIDE : AS SHOWN

DATE: 06NOV10  
DWG: 32990  
SCALE: 1:1  
HARN JPR 1/P WPR F59 2011

DRAWING NO. 115088202



ADDED NOTE:  
INSTALL 3\"/>

PREFERRED CONSTRUCTION  
IS TO REPLACE THE FORD PIGTAIL WITH THE WIRE GAUGE AND COLOR AT A TO BE EXTENDED 15\"/>

ALTERNATE CONSTRUCTION  
SPLICE TO FORD PIGTAIL AS SHOWN, THEN COVER PER NOTE #2.

**HARNES AND LOOM TOLERANCES**

LP TO 60" : -0/+2"  
60" TO 100" : -0/+4"  
100" TO 200" : -0/+5"  
200" TO 400" : -0/+6"  
400" TO 600" : -0/+7"  
80 TO 80 : -0/+2"

LENGTHS APPLY FROM BREAKOUT TO BREAKOUT OR BREAKOUT TO WIRE ENTRY SIDE OF CONNECTOR, OR END OF COVER.

BASED ON:  
095088399

9. THIS IS A PURCHASED HARNES. NO BILL OF MATERIAL EXISTS.
  8. VENDOR MAY REPLACE PIGTAILS WITH WIRING TO APPROVED MOLDINGS OR CONNECTORS. PIGTAILS SHOWN IN TERMINAL VIEW.
  7. HARNES TO BE TESTED FOR CONTENT, OPENS, SHORTS, AND CONTINUITY.
  6. CONNECTORS SHOWN FROM WIRE ENTRY SIDE, UNLESS OTHERWISE NOTED.
  5. SPLICES TO BE AUTOMATED WITH SOLDER AND ADHESIVE LINED HEAT SHRINK TUBING.
  4. TAPE [1111096]: 6" AT BREAKOUTS AND 2" AT LOOM ENDS.
  3. SHOWING MORGAN OLSON PART NUMBER, REVISION LEVEL, AND DATE OF MANUFACTURE.
  2. SPLIT NYLON LOOM, BLACK WITH GRAY STRIPE, UNLESS OTHERWISE NOTED.
  1. GXL WIRE.
- NOTES:

**PROPRIETARY**

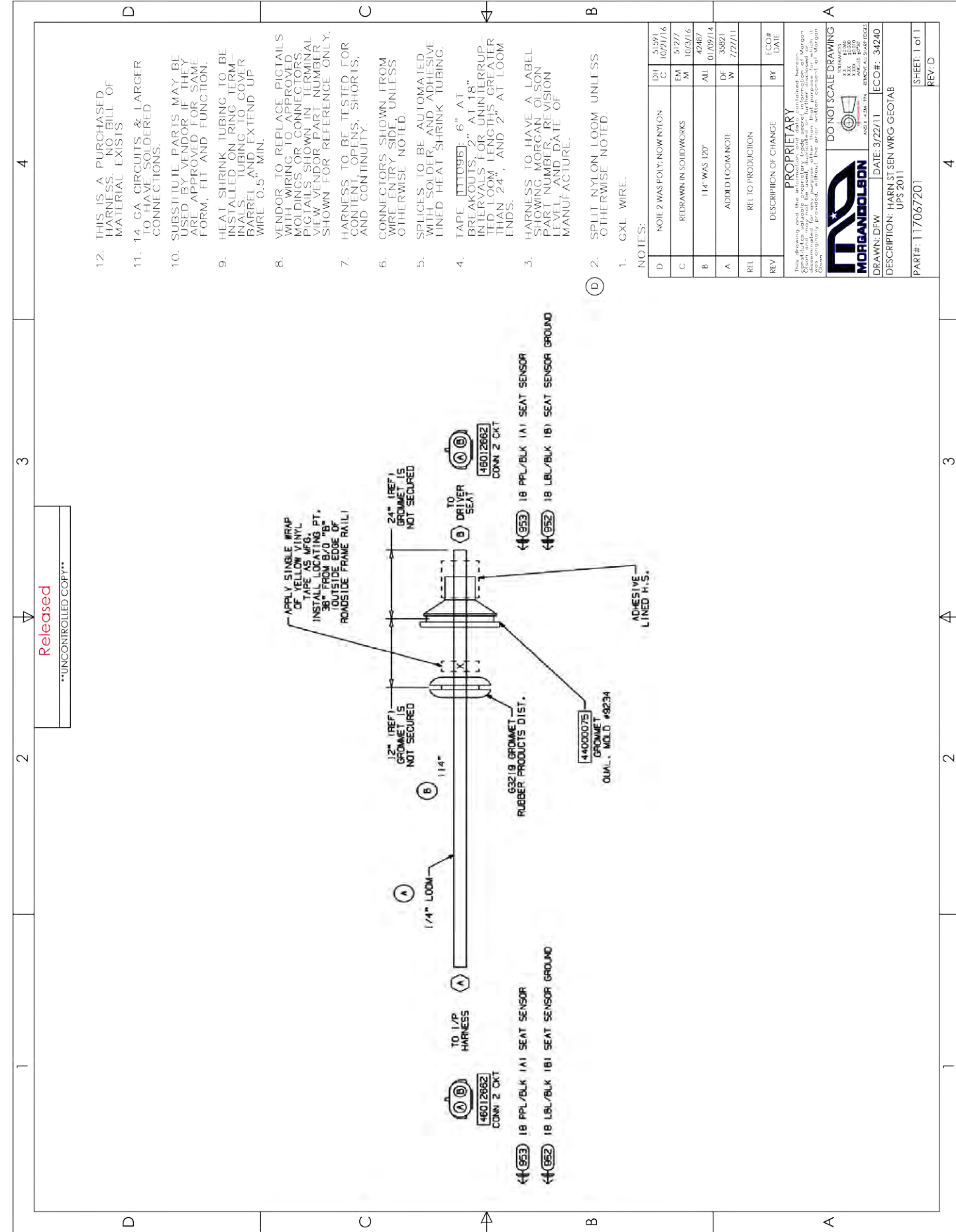
**MORGAN OLSON**

GENERAL STANDARD UNLESS OTHERWISE NOTED:

1. WIRE GAUGE : 16 AWG  
2. WIRE TYPE : 100% COPPER  
3. WIRE COLOR : AS SHOWN  
4. WIRE LENGTH : AS SHOWN  
5. WIRE ENTRY SIDE : AS SHOWN  
6. WIRE ENTRY SIDE : AS SHOWN  
7. WIRE ENTRY SIDE : AS SHOWN  
8. WIRE ENTRY SIDE : AS SHOWN  
9. WIRE ENTRY SIDE : AS SHOWN  
10. WIRE ENTRY SIDE : AS SHOWN

DATE: 06NOV10  
DWG: 32990  
SCALE: 1:1  
HARN JPR 1/P WPR F59 2011

DRAWING NO. 115088202



Released  
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DRAWING NO. 122111201	REV 1 of 2	SHT 1 of 2	DESCRIPTION RELEASE TO PRODUCTION	BY CHK.	DATE
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**PROPRIETARY**


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GENERAL STANDARDS UNLESS OTHERWISE NOTED:

- TOLERANCE: .X ± .060 .XX ± .030 .XXX ± .010
- ANGLES: .X ± .5 DEGREES
- BREAK ALL EXPOSED SHARP EDGES AND DEBURR. FOR FLAT PATTERNS ALL INSIDE CORNERS MUST BE WITH .188" R. PATTERNS ALL OUTSIDE CORNERS MAY BE ROUNDED UP TO .188" R TO FACILITATE PRODUCTION.
- ROUND ALL EDGES TO .031" R.

DRAWN	CHECKED	RELEASE NO.
JKP		39448
DATE	DATE	DATE
16OCT12		16OCT12
DO NOT SCALE		
NAME:		
HARN EXTN CORD 25 FEET		
120V SUEOOW WP W/BOOT&PLUG		
SHT	DRAWING NO.	SCALE
1 of 2	122111201	NONE
		REV

REV	DESCRIPTION	BY	REL NO
	RELEASE TO PRODUCTION	CHK	DATE
<p><b>PROPRIETARY</b></p> <p>This drawing and the information and data contained hereon constitutes valuable proprietary trade secret information of Morgan Olson Corp. and may not be used, duplicated or further disclosed or disseminated for any purpose other than that purpose for which it was originally provided, without the prior written consent of Morgan Olson Corp.</p>			
			
<p>GENERAL STANDARDS UNLESS OTHERWISE NOTED:</p> <ol style="list-style-type: none"> <li>TOLERANCE: .X ± .060 .XX ± .030 .XXX ± .010</li> <li>ANGLES: X ± 5 DEGREES</li> <li>BREAK ALL EXPOSED SHARP EDGES AND DEBURR.</li> <li>FOR FLAT PATTERNS ALL INSIDE CORNERS MUST BE ROUNDED UP TO .031" R.</li> <li>FOR FLAT PATTERNS ALL OUTSIDE CORNERS MAY BE ROUNDED UP TO .188" R TO FACILITATE PRODUCTION.</li> </ol>			
DRAWN	CHECKED	RELEASE NO	
JKP	-	39448	
DATE	DATE	DATE	
16OCT12	-	16OCT12	
DO NOT SCALE.			
NAME:			
HARN EXTN CORD 25 FEET			
120V SJEOWW WP W/BOOT&PLUG			
SHT	DRAWING NO.	SCALE	
2 of 2	122111201	NONE	
	REV		

7  
APPLY #4100261 SEALANT TO THIS END OF RECEPTACLE



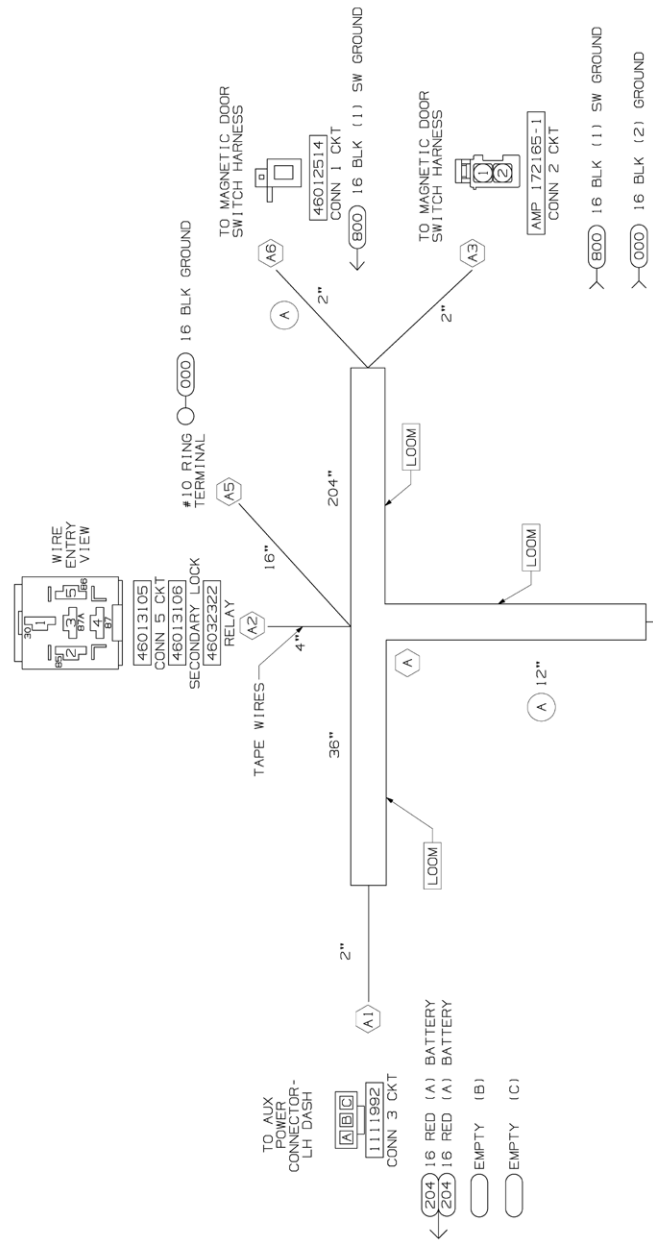
INSTALL OTHER END OF CABLE INTO #4607625 RECEPTACLE. BLACK - "GOLD", WHITE - "SILVER", GREEN - "GREEN".

DRAWING NO.	SHT
122111201	2 of 2

DRAWING NO.	REV	SHT
137392203	A	1 of 1
REV.	DESCRIPTION	BY
	RELEASE TO PRODUCTION	
A	12" WAS 225"	ALL
	BREAKOUT AS ADDED	17/7/15

CIRCUIT	DESCRIPTION	END POINTS	FUNCTION
B00	16 BLK SW GROUND	A2,A3	SW GROUND
204	16 RED BATTERY	A1,A2	BATTERY
006	16 TAN STEPWELL LP	A2,A4	STEPWELL LP
000	16 BLK GROUND	A3,A4,A5	GROUND

- > (204) 16 RED (1) BATTERY (30)
- > (204) 16 RED (2) BATTERY (85)
- > ( ) EMPTY (3) NOT USED (87A)
- > (006) 16 TAN (4) STEPWELL LP (87)
- > (B00) 16 BLK (5) SW GROUND (86)



- VENDOR MAY REPLACE PIGTAILS WITH WIRING TO APPROVED MOLDINGS OR SHOWN IN TERMINAL VIEW.
- HARNESSES TO BE TESTED FOR CONTENTS, OPENINGS, SHORTS, AND CONTINUITY.
- CONNECTORS SHOWN FROM WIRE ENTRY SIDE, UNLESS OTHERWISE NOTED.
- SPLICES TO BE AUTOMATED WITH HEAT SHRINK TUBING. ALL SPLICES MUST BE ACCEPTABLE FOR MANUFACTURE.
- TAPE [1111098]: 6" AT BREAKOUTS AND 2" AT LOOM ENDS.
- HARNESSES TO HAVE A LABEL SHOWING MORGAN OLSON PART NUMBER, REVISION LEVEL, AND DATE OF MANUFACTURE.
- SPLIT POLY LOOM UNLESS OTHERWISE NOTED.
- 6XL WIRE.

NOTES:

**PROPRIETARY**  
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GENERAL STANDARDS UNLESS OTHERWISE NOTED:	REV
1. TOLERANCE: .X ± .060 .XX ± .030 .XXX ± .010	A
2. ANGLES: X ± 5 DEGREES	
3. BREAK ALL EXPOSED SHARP EDGES AND DEBURR.	
4. FOR FLAT PATTERNS ALL INSIDE CORNERS MUST BE ROUNDED UP TO .031" R.	
5. FOR FLAT PATTERNS ALL OUTSIDE CORNERS MAY BE ROUNDED UP TO .188" R TO FACILITATE PRODUCTION.	
DRAWN	DATE
JKP	16OCT12
CHECKED	DATE
-	16OCT12
RELEASE NO	
39448	
DO NOT SCALE.	
NAME:	
HARN EXTN CORD 25 FEET	
120V SJEOWW WP W/BOOT&PLUG	
SHT	DRAWING NO.
2 of 2	137392203
SCALE	REV
NONE	A

BASED ON:  
127592201

HARNESSES AND LOOM TOLERANCES  
UP TO 60" = -0/+2"  
60" TO 100" = -0/+4"  
100" TO 200" = -0/+5"  
200" TO 400" = -0/+6"  
400" TO 600" = -0/+7"  
OVER 600" = -0/+8"  
BO TO BO = -0/+2"  
TOLERANCE IS NOT APPLICABLE TO OVERALL HARNESS LENGTH, BREAKOUT TO END, OR LOOM.

CIRCUIT	DESCRIPTION	END POINTS	FUNCTION
000	16 WHT	A1, B1, B2	GROUND
001	16 BLK	A2, B3, B4	POWER

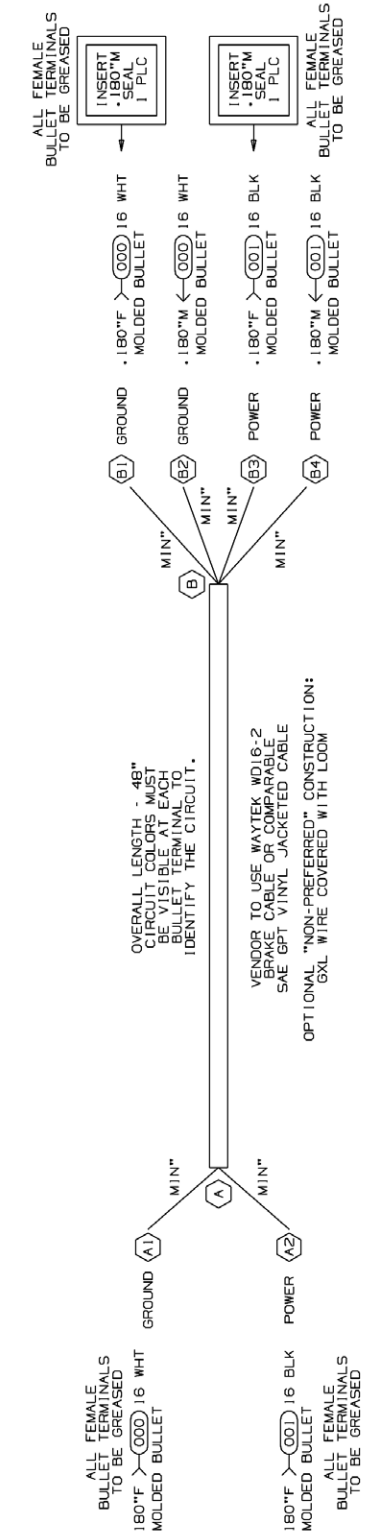
DRAWING NO.	14008B200	REV	J of L	SHT
REV.	DESCRIPTION	BY	DATE	
	RELEASE TO PRODUCTION			

- VENDOR MAY REPLACE PIGTAILS WITH WIRING TO APPROVED MOLDINGS OR CONNECTORS. PIGTAILS SHOWN IN TERMINAL VIEW.
- HARNESS TO BE TESTED FOR CONTENT, OPENS, SHORTS, AND CONTINUITY.
- CONNECTORS SHOWN FROM WIRE ENTRY SIDE, UNLESS OTHERWISE NOTED.
- SPLICES TO BE AUTOMATED WITH HEAT SHRINK TUBING. HEAT SHRINK BUTT SPLICES ARE ACCEPTABLE FOR M.O.D. FABRICATION IF NECESSARY.
- TAPE [1111096]: 6" AT BREAKOUTS AND 2" AT LOOM ENDS.
- HARNESS TO HAVE A LABEL FOR IDENTIFICATION. PART NUMBER, REVISION LEVEL, AND DATE OF MANUFACTURE.
- SPLIT POLY LOOM UNLESS JACKETED CABLE IS USED.
- JACKETED CABLE AS NOTED.

NOTES:

**PROPRIETARY**  
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<b>MORGAN OLSON</b>	
GENERAL STANDARDS UNLESS OTHERWISE NOTED:	
1. MATERIALS: A. 16 GA. WIRE: 100% COPPER, 100% ANNEALED, 100% STRANDED.	DATE: 17DEC13
2. WIRE MARKINGS: ALL WIRE CONDUCTORS MUST BE MARKED WITH THE MANUFACTURER'S IDENTIFICATION (M.I.) NUMBER.	MTS: 42440
3. WIRE STRANDED: ALL WIRE CONDUCTORS MUST BE STRANDED UNLESS OTHERWISE NOTED.	DATE: 17DEC13
4. WIRE GAUGE: ALL WIRE CONDUCTORS MUST BE GAUGED TO THE SPECIFIED GAUGE.	DO NOT SCALE
5. WIRE COLOR: ALL WIRE CONDUCTORS MUST BE COLOR CODED TO THE SPECIFIED COLOR.	NAME: HARNESS JUMPER 48" 2W 2W "Y"
6. WIRE LENGTH: ALL WIRE CONDUCTORS MUST BE CUT TO THE SPECIFIED LENGTH.	DESCRIPTION: (180F TO 180F/180M EACH CKT)
7. WIRE TOLERANCES: ALL WIRE CONDUCTORS MUST BE CUT TO THE SPECIFIED TOLERANCES.	SHT: NONE
8. WIRE STRIPPING: ALL WIRE CONDUCTORS MUST BE STRIPPED TO THE SPECIFIED LENGTH.	J of L: 14008B200
9. WIRE BUNDLING: ALL WIRE CONDUCTORS MUST BE BUNDLED TO THE SPECIFIED LENGTH.	REV: REV



ALL FEMALE BULLET TERMINALS TO BE GREASED

OVERALL LENGTH - 48" CIRCUIT COLORS MUST BE VISIBLE AT EACH BULLET TERMINAL TO IDENTIFY THE CIRCUIT.

VENDOR TO USE WAYTEK WDL6-2 BRAKE CABLE OR COMPARABLE SAE OPT VINYL JACKETED CABLE

OPTIONAL "NON-PREFERRED" CONSTRUCTION: GXL WIRE COVERED WITH LOOM

HARNESS AND LOOM TOLERANCES:  
 UP TO 60" : -0/+2"  
 60" TO 100" : -0/+4"  
 100" TO 200" : -0/+5"  
 200" TO 400" : -0/+6"  
 400" TO 600" : -0/+7"  
 OVER 600" : -0/+8"  
 BO TO BO : -0/+2"

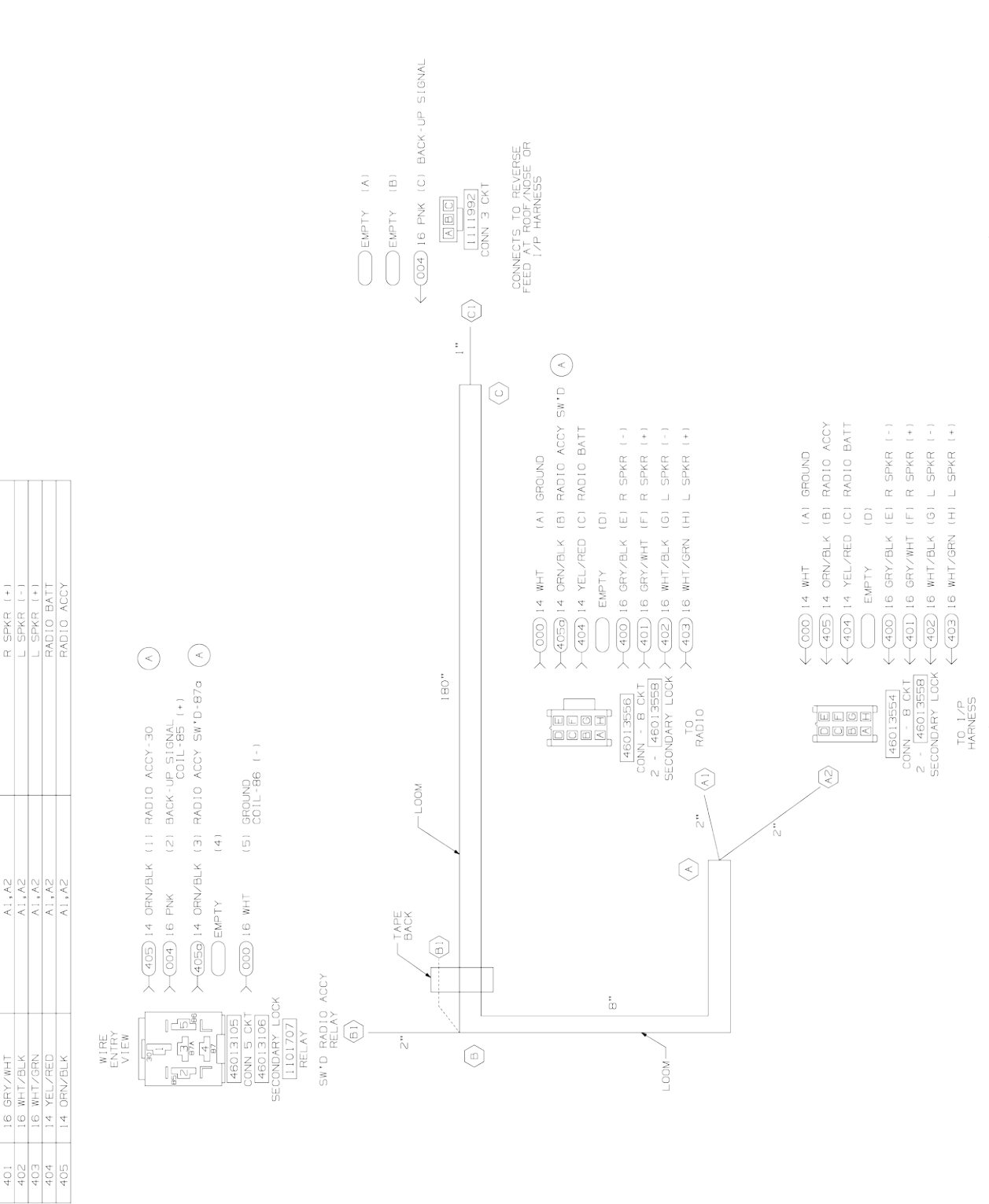
TOLERANCE IS NOT APPLICABLE TO OVERALL HARNESS LENGTH, BREAKOUT TO END, OR LOOM.

FIRST USE: CURSIVE MID-BODY MARKER

REV	DESCRIPTION	BY	DATE
A	RADIO ACCY SW'D	JLL	02/12/16

DRAWING NO.	155084203	REV	A	SHT
REV.	DESCRIPTION	BY	DATE	
	RELEASE FOR PRODUCTION			

CIRCUIT	DESCRIPTION	END POINTS	FUNCTION
000	14 WHT	A2, B1	GROUND
405a	14 ORN/BLK	A1, B1	RADIO ACCY SW'D
004	16 PNK	B1, C1	BACK-UP SIGNAL
400	16 GRN/BLK	A1, A2	R SPKR (-)
401	16 GRN/WHI	A1, A2	R SPKR (+)
402	16 WHT/BLK	A1, A2	L SPKR (-)
403	16 WHT/GRN	A1, A2	L SPKR (+)
404	14 YEL/RED	A1, A2	RADIO BATT
405	14 ORN/BLK	A1, A2	RADIO ACCY



- THIS IS A PURCHASED MATERIAL. NO BILL OF MATERIAL EXISTS.
- VENDOR MAY REPLACE PIGTAILS WITH WIRING TO APPROVED MOLDINGS OR CONNECTORS. PIGTAILS SHOWN IN TERMINAL VIEW.
- HARNESS TO BE TESTED FOR CONTENT, OPENS, SHORTS, AND CONTINUITY.
- CONNECTORS SHOWN FROM WIRE ENTRY SIDE, UNLESS OTHERWISE NOTED.
- SPLICES TO BE AUTOMATED WITH SOLDER AND ADHESIVE LINED HEAT SHRINK TUBING.
- TAPE [1111096]: 6" AT BREAKOUTS, 2" AT 18" INTERVALS FOR UNINTERRUPTED LENGTHS GREATER THAN 24", AND 2" AT LOOM ENDS.
- HARNESS TO HAVE A LABEL FOR IDENTIFICATION. PART NUMBER, REVISION LEVEL, AND DATE OF MANUFACTURE.
- SPLIT POLY LOOM UNLESS OTHERWISE NOTED.
- GXL WIRE.

NOTES:

**PROPRIETARY**  
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<b>MORGAN OLSON</b>	
GENERAL STANDARDS UNLESS OTHERWISE NOTED:	
1. MATERIALS: A. 16 GA. WIRE: 100% COPPER, 100% ANNEALED, 100% STRANDED.	DATE: 08SEP15
2. WIRE MARKINGS: ALL WIRE CONDUCTORS MUST BE MARKED WITH THE MANUFACTURER'S IDENTIFICATION (M.I.) NUMBER.	MTS: 45971
3. WIRE STRANDED: ALL WIRE CONDUCTORS MUST BE STRANDED UNLESS OTHERWISE NOTED.	DATE: 08SEP15
4. WIRE GAUGE: ALL WIRE CONDUCTORS MUST BE GAUGED TO THE SPECIFIED GAUGE.	DO NOT SCALE
5. WIRE COLOR: ALL WIRE CONDUCTORS MUST BE COLOR CODED TO THE SPECIFIED COLOR.	NAME: HARN SW RADIO OFF
6. WIRE LENGTH: ALL WIRE CONDUCTORS MUST BE CUT TO THE SPECIFIED LENGTH.	DESCRIPTION: REV TRIG W/ RLY
7. WIRE TOLERANCES: ALL WIRE CONDUCTORS MUST BE CUT TO THE SPECIFIED TOLERANCES.	SHT: NONE
8. WIRE STRIPPING: ALL WIRE CONDUCTORS MUST BE STRIPPED TO THE SPECIFIED LENGTH.	J of L: 155084203
9. WIRE BUNDLING: ALL WIRE CONDUCTORS MUST BE BUNDLED TO THE SPECIFIED LENGTH.	REV: A

DRAWING NO.	REV	SHT
15738B200		LOFJ
DESCRIPTION	BY	DATE
RELEASE TO PRODUCTION		

- VENDOR MAY REPLACE PIGTAILS WITH WIRING TO APPROVED MOLDINGS OR CONNECTORS. PIGTAILS SHOWN IN TERMINAL VIEW.
- HARNESSES TO BE TESTED FOR CONTENT, OPENS, SHORTS, AND CONTINUITY.
- CONNECTORS SHOWN FROM WIRE ENTRY SIDE, UNLESS OTHERWISE NOTED.
- SPLICES TO BE AUTOMATED WITH HEAT SHRINK TUBING. HEAT SHRINK BUTT SPLICES ARE ACCEPTABLE FOR M.O. FABRICATION IF NECESSARY.
- TAPE [111096]: 6" AT BREAKOUTS AND 2" AT LOOM ENDS.
- HARNESSES TO HAVE A LABEL SHOWING MORGAN OLSON PART NUMBER, REVISION LEVEL AND DATE OF MANUFACTURE.
- SPLIT ONLY LOOM UNLESS JACKETED CABLE IS USED.
- JACKETED CABLE AS NOTED.

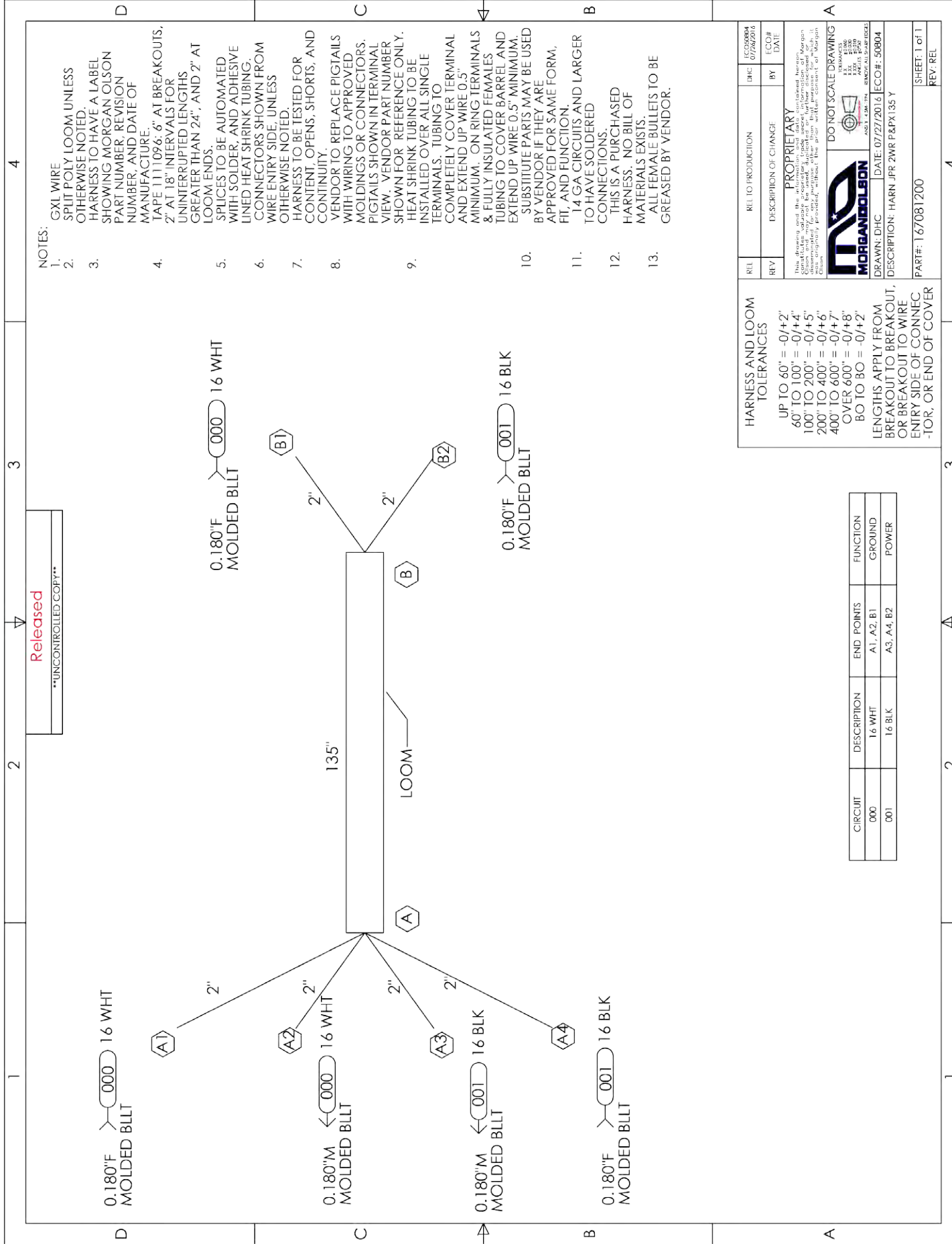
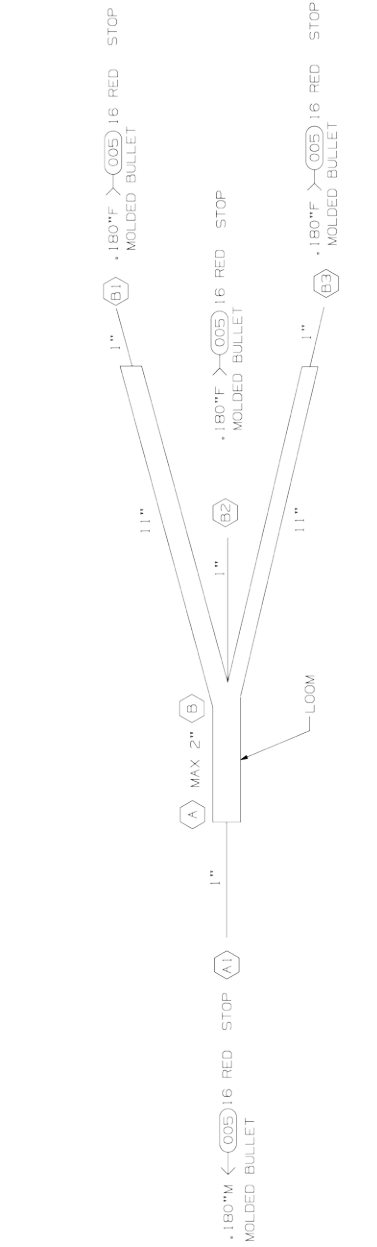
**NOTES:**

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GENERAL STANDARDS UNLESS OTHERWISE NOTED:		
1. DIMENSIONS - UNLESS OTHERWISE SPECIFIED:	INCHES - 1/16, 1/8, 1/4, 3/8, 1/2, 5/8, 3/4, 7/8, 1, 1 1/8, 1 1/4, 1 1/2, 1 3/4, 1 7/8, 2, 2 1/4, 2 1/2, 2 3/4, 3, 3 1/4, 3 1/2, 3 3/4, 4, 4 1/4, 4 1/2, 4 3/4, 5, 5 1/4, 5 1/2, 5 3/4, 6, 6 1/4, 6 1/2, 6 3/4, 7, 7 1/4, 7 1/2, 7 3/4, 8, 8 1/4, 8 1/2, 8 3/4, 9, 9 1/4, 9 1/2, 9 3/4, 10, 10 1/4, 10 1/2, 10 3/4, 11, 11 1/4, 11 1/2, 11 3/4, 12, 12 1/4, 12 1/2, 12 3/4, 13, 13 1/4, 13 1/2, 13 3/4, 14, 14 1/4, 14 1/2, 14 3/4, 15, 15 1/4, 15 1/2, 15 3/4, 16, 16 1/4, 16 1/2, 16 3/4, 17, 17 1/4, 17 1/2, 17 3/4, 18, 18 1/4, 18 1/2, 18 3/4, 19, 19 1/4, 19 1/2, 19 3/4, 20.	MM - 1, 2, 3, 4, 5, 6, 8, 10, 12, 15, 20, 25, 30, 35, 40, 50, 60, 70, 80, 90, 100, 125, 150, 200, 250, 300, 350, 400, 450, 500, 600, 700, 800, 900, 1000.
2. ANGLES - UNLESS OTHERWISE SPECIFIED:	90° AND MULTIPLES THEREOF.	
3. DIMENSIONS OF PARTS TO BE MANUFACTURED:	UNLESS OTHERWISE SPECIFIED, DIMENSIONS SHALL BE TO THE CENTERLINE OF THE PART UNLESS OTHERWISE NOTED.	
4. DIMENSIONS OF PARTS TO BE TESTED:	UNLESS OTHERWISE SPECIFIED, DIMENSIONS SHALL BE TO THE CENTERLINE OF THE PART UNLESS OTHERWISE NOTED.	
DATE	21OCT15	DATE
ALL		DATE
48230		DATE
21OCT15		DATE
DO NOT SCALE		DATE
HARNESSES TO BE TESTED FOR:	CONTENT, OPENS, SHORTS, AND CONTINUITY.	
VENDOR TO REPLACE PIGTAILS WITH WIRING TO APPROVED MOLDINGS OR CONNECTORS. PIGTAILS SHOWN IN TERMINAL VIEW. VENDOR PART NUMBER SHOWN FOR REFERENCE ONLY. HEAT SHRINK TUBING TO BE INSTALLED OVER ALL SINGLE TERMINALS. TUBING TO COMPLETELY COVER TERMINAL AND EXTEND UP WIRE 0.5" MINIMUM. ON RING TERMINALS & FULLY INSULATED FEMALES TUBING TO COVER BARREL AND EXTEND UP WIRE 0.5" MINIMUM. SUBSTITUTE PARTS MAY BE USED BY VENDOR IF THEY ARE APPROVED FOR SAME FORM, FIT, AND FUNCTION.	TUBING TO HAVE SOLDERED CONNECTIONS. THIS IS A PURCHASED HARNESSES. NO BILL OF MATERIALS EXISTS. ALL FEMALE BULLETS TO BE GREASED BY VENDOR.	
HARNESSES TO HAVE A LABEL SHOWING MORGAN OLSON PART NUMBER, REVISION LEVEL AND DATE OF MANUFACTURE.		
SPLIT ONLY LOOM UNLESS JACKETED CABLE IS USED.		
JACKETED CABLE AS NOTED.		
SCALE	NONE	
DRAWING NO.	15738B200	
SHT	1 OF 1	

HARNESSES AND LOOM TOLERANCES:	
UP TO 60"	: -0/+2"
60" TO 100"	: -0/+4"
100" TO 200"	: -0/+5"
200" TO 400"	: -0/+6"
400" TO 600"	: -0/+7"
OVER 600"	: -0/+8"
BO TO BO	: -0/+2"
TOLERANCE IS NOT ACCUMULATIVE. LENGTH HARNESSES TO PERFORM BREAKOUT TO END, OR LOOM.	



Released  
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**NOTES:**

- GXL WIRE SPLIT ONLY LOOM UNLESS OTHERWISE NOTED.
- HARNESSES TO HAVE A LABEL SHOWING MORGAN OLSON PART NUMBER, REVISION NUMBER, AND DATE OF MANUFACTURE.
- TAPE [111096]: 6" AT BREAKOUTS, 2" AT 18" INTERVALS FOR UNINTERRUPTED LENGTHS GREATER THAN 24", AND 2" AT LOOM ENDS.
- SPLICES TO BE AUTOMATED WITH SOLDER, AND ADHESIVE LINED HEAT SHRINK TUBING.
- CONNECTORS SHOWN FROM WIRE ENTRY SIDE, UNLESS OTHERWISE NOTED.
- HARNESSES TO BE TESTED FOR CONTENT, OPENS, SHORTS, AND CONTINUITY.
- VENDOR TO REPLACE PIGTAILS WITH WIRING TO APPROVED MOLDINGS OR CONNECTORS. PIGTAILS SHOWN IN TERMINAL VIEW. VENDOR PART NUMBER SHOWN FOR REFERENCE ONLY. HEAT SHRINK TUBING TO BE INSTALLED OVER ALL SINGLE TERMINALS. TUBING TO COMPLETELY COVER TERMINAL AND EXTEND UP WIRE 0.5" MINIMUM. ON RING TERMINALS & FULLY INSULATED FEMALES TUBING TO COVER BARREL AND EXTEND UP WIRE 0.5" MINIMUM. SUBSTITUTE PARTS MAY BE USED BY VENDOR IF THEY ARE APPROVED FOR SAME FORM, FIT, AND FUNCTION.
- TUBING TO HAVE SOLDERED CONNECTIONS. THIS IS A PURCHASED HARNESSES. NO BILL OF MATERIALS EXISTS. ALL FEMALE BULLETS TO BE GREASED BY VENDOR.

HARNESSES AND LOOM TOLERANCES:	
UP TO 60"	: -0/+2"
60" TO 100"	: -0/+4"
100" TO 200"	: -0/+5"
200" TO 400"	: -0/+6"
400" TO 600"	: -0/+7"
OVER 600"	: -0/+8"
BO TO BO	: -0/+2"
TOLERANCE IS NOT ACCUMULATIVE. LENGTH HARNESSES TO PERFORM BREAKOUT TO END, OR LOOM.	

CIRCUIT	DESCRIPTION	END POINTS	FUNCTION
000	16 WHT	A1, A2, B1	GROUND
001	16 BLK	A3, A4, B2	POWER

REL	REL TO PRODUCTION	DWG	15738B200
REV	DESCRIPTION OF CHANGE	BY	
		DATE	
<p><b>PROPRIETARY</b> This drawing and the information and data contained herein are the property of Morgan Olson and may be used for any purpose other than that authorized by Morgan Olson without the prior written consent of Morgan Olson.</p>			
<p><b>DO NOT SCALE DRAWING</b></p>			
<p>MORGAN OLSON 15738B200 DATE: 07/27/2016 ECCO#: 50804</p>			
<p>DESCRIPTION: HARN JPR ZWR P&amp;PI 135 Y</p>			
<p>PART#: 167081200</p>			
SHEET: 1 of 1			REV: REL



